Environment Canada
Environmental Conservation

Environnement Canada
Conservation de l'environnement

DETAILED — SURFACE WATER QUALITY DATA

British Columbia 1979 – 1981

C. THORP
MARCH 1985

Inland Waters Directorate
Pacific and Yukon Region
Vancouver, B.C.

DETAILED SURFACE WATER QUALITY DATA

BRITISH COLUMBIA

1979 - 1981

C. Thorp
March 1985

Water Quality Branch
Inland Waters Directorate
Pacific and Yukon Region
Vancouver, British Columbia

CONTENTS

	Page
ABSTRACT	v
INTRODUCTION	vii
GUIDE TO USE OF TABLES	viii
HYDROMETRIC DATA	ix
CODING OF ANALYTICAL METHODS	ix
DEFINITION OF TERMS AND SYMBOLS	x
ADDITIONAL INFORMATION	xi
DETAILED DATA	1
ALPHABETICAL INDEX of stations	57
STATION LOCATION MAP	59

ABSTRACT

Chemical and physical surface water data for British Columbia collected during the period 1979 to 1981 are detailed herein. These data are intended to provide a ready reference to water quality variables.

RESUME

Les données chimiques et physiques sur les eaux de surface de la Colombie-Britannique recueillies de 1979 à 1981 sont présentées de façon à permettre la consultation rapide des variables de la qualité de l'eau.

INTRODUCTION

A series of studies of the chemical quality of surface waters in British Columbia was started in 1949 by the Industrial Water Resources of Canada, Technical Surveys. The results obtained during the period 1949 - 53 were published as Industrial Water Resources of Canada, Water Survey Reports Nos. 4, 5, 6, and 8. In 1960, a five-year study of the chemical quality of surface waters in Western Canada was initiated. This survey was incorporated in 1965 in the International Hydrologic Decade (IHD) program set up under the auspices of the United Nations.

The water quality aspects of the Canadian IHD program involve the determination of seasonal variations in quality, the study of relationships between water quality and natural factors such as climate, geology, soils, precipitation and discharge, and planning for the most effective use of water in the light of different quality requirements.

In 1967, the IHD program was extended to include a study of minor elements, toxic metals, nutrients and biocides. This survey is presently known as the National Water Quality Monitoring Program.

The water quality data presented herein were obtained in the laboratory of the Water Quality Branch, Pacific and Yukon Region, from the National Water Quality Monitoring Program in the province of British Columbia for the period July 17, 1979 to December 31, 1981. It does not include data collected during special studies nor surveys. Special studies or surveys are usually of short duration with specific objectives such as determining the source, the pathways, or the distribution of a pollutant in the aquatic environment. Long-term monitoring may be defined as the systematic collection of samples at strategic locations to provide an overview of the water quality in the aquatic system. This information supports work for assessing trends in the aquatic environment, establishing water quality objectives and assessing the impacts of development.

The monitoring program was reinstated in British Columbia during 1979 to comply with federal responsibilities. The sampling procedures at that time were those which had been used for earlier data collections and were also being used by similar federal programs in other provinces. This procedure utilized a two litre bottle in a cast iron frame but limited the number of variables analyzed as generally only one bottle was collected without preservation at each station per trip. The need to obtain nutrient data in replicate and information on heavy metals which require preservation was recognized. Where heavy metal results are reported, sampling procedures were modified. An exception is the Salmon River near Hyder, Alaska (00AK08DC0001) where sampling initially included extra bottles for cyanide and metal analyses. A Multiple Sampler (Sampling for Water Quality, Fig. 4, p8. Environment Canada publication 1983, ISBN 0-662-12380-8) was designed for the program to provide a mechanism for obtaining

data for variables which require replication or preservation. This sampler was not, however used for water collections on the Salmon River, Pend D'Oreille River at Waneta nor the Fraser River at Hope. The multiple sampler was utilized when samples were collected for mercury analyses. Replicate samples for analyses of nutrients, phosphorus and nitrogen, were also collected when mercury was sampled (and reported). At these times three replicates for each were analyzed and the mean calculated and recorded for each variable.

This report is the second of a series of detailed water quality data reports: the first publication covering the period 1961 - 1971. It is the product of a joint program of the Water Resources Branch and the Water Quality Branch. The efforts of the Water Resources Branch for the majority of sample collections and for the provision of hydrometric data is much appreciated. The data contained in this report are stored on the NAQUADAT computerized storage and retrieval system. A magnetic tape of retrieved data was processed by computerized photo-composition with a lasar printing technique to produce the copy from which the tables were printed. The assistance of personnel in the Data and Instrumentation Section, Water Quality Branch, Ottawa, in preparing this report is gratefully acknowledged.

GUIDE TO USE OF TABLES

Data in this report are arranged in order of the 12-digit code assigned to each station (NAQUADAT station number). This code incorporates the Water Survey of Canada basin and subbasin designation. In the station number, the first two numerals refer to the water type (00 designates a stream, 01 a lake or reservoir) and they are followed by a two-letter provincial code (BC for British Columbia). The next two numerals and two letters refer to the basin and sub-basin respectively, followed by a four-digit sequence number. An alphabetical station index and a station location map are presented at the end of this report. Geographical coordinates of the sampling sites are also provided in the index.

HYDROMETRIC DATA

A summary of hydrometric data has been included where available to provide some coherence between variable concentrations and the discharge regime. This information follows the analytical results for each station and includes mean daily, annual mean, minimum and maximim discharge data. The mean daily discharge is included for each day of sampling followed by the annual mean listed on December 31st for each year. The maximum and minimum daily discharges for each station per year are listed on the days for which they occur.

A complete listing of discharge information is available in the annual publication Surface Water Data, British Columbia as prepared by the Water Survey of Canada Division under the direction of the Director, Water Resources Branch, Department of the Environment, Ottawa. The basic hydrometric data were collected and compiled under the supervision of the Regional Chief of the Water Resources Branch, Vancouver, British Columbia.

CODING OF ANALYTICAL METHODS

The analytical method employed is defined by the six-digit code number shown at the top of each column of data. If the analytical method used for a particular datum was different from the one indicated in the column heading, then the last three digits of the appropriate method code appear as backup codes beside the actual result. The variable code number is of the form ZZXYYA where:

1. ZZ is a numeric code designating the type of test as shown in the table following:

TESTS	VARIABLE CODE
Chemical tests	ATXYYA (AT-Atomic Number)
Balances and other calculated variables	00XYYA
General physical tests	02XYYA
General chemical tests	10XYYA
Other information	97XYYA, 98XYYA and 99XYYA

2. X is a one-digit numerical code (0-9) subdividing group (1).

3. YY is a two-digit sequential numerical code identifying the

analytical method used for the test. In certain cases this field is used to further subdivide the type of tests described in (1) and (2).

4. A is a one-digit alphabetical code indicating the place where the analysis was carried out and whether or not the sample was preserved at the time of sampling. S represents an *in situ* analysis; F, a field laboratory analysis; L, a laboratory analysis without any on-site preservation; and P, a laboratory analysis with on-site preservation of the sample.

In some cases values within the same column have different numbers of significant figures. This may occur when two or more analytical methods have been used to measure a particular variable and generally reflects the increased precision of the newer method.

A complete description of all the variable code numbers is given in the NAQUADAT Dictionary.

DEFINITION OF TERMS AND SYMBOLS

GEMS	Global Environmental Monitoring Study
JTU's	Jackson turbidity units
L	less than
Lat.	latitude in degrees, minutes and seconds
Long.	longitude in degrees, minutes and seconds
MG/L	milligrams per litre
NAQUADAT	National Water Quality Data Storage and Retrieval System
Q	signifies that at least one of the values used in the computation of this result was reported as less than the detection limit. In the computation of calculated parameters analytical values reported as "less than the detection limit" are interpreted as being equal to the numeric value of the detection limit. For example, when computing total nitrogen, given a total dissolved nitrogen value of less than 0.1 milligrams

per litre (L 0.1 MG/L) and a nitrate plus nitrite (NO3 + NO2) value of 0.07 MG/L, the numeric values would be simply added to give a total nitrogen 0.17 MG/L.

NO./100 ML number per 100 millilitres

REL. UNITS relative colour units

SUBM ID submitter identification number. This identifies the sample collector and the project under which the data was collected.

UG/L Micrograms per litre

USIE/CM Microsiemens per centimetre

ADDITIONAL INFORMATION

Additional information on these data or requests for data not inluded in this publication may be obtained from:

Coordinator
Water Quality Monitoring
Water Quality Branch
Environment Canada
502-1001 West Pender Street
Vancouver, B.C. V6E 2M9

Phone (604) 666-6038

Questions specifically relating to analytical methodologies should be directed to:

Head Analytical Services Division
Water Quality Branch
502-1001 West Pender Street
Vancouver, B.C. V6E 2M9

Phone (604) 987-7756

Detailed Data

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 09AK08BC0001 LAT 58D 1M 18S LONG 130D 4M 17S
SALMON RIVER NEAR HYDER, ALASKA ABOVE CONFLUENCE WITH TEXAS CREEK 333.5 KM BELOW BC-ALASKA BOUNDARY

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
81-06-15	1700	330	15.0	4.0	21.7	--	7.3	--	63	64.00
81-06-22	1345	330	15.0	4.0	18.5	--	8.0	--	65	42.00
81-07-01	1400	330	20.0	4.0	19.2	--	7.4	--	61	40.00
81-07-07	1715	330	18.0	5.0	19.2	--	7.4	--	67	12.00
81-07-15	1715	330	22.0	7.0	19.4	--	7.5	--	54	96.00
81-10-06	1845	330	7.2	--	19.6	--	7.4	--	83.	15.00
81-12-09	1700	330	5.0	3.0	21.2	--	7.9	--	147.	48

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02071L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
81-06-15	1700	330	10	.0	20.0	27.3	9.9	.7	5	.6
81-06-22	1345	330	5	.0	20.7	28.8	9.8	1.1	4	.4
81-07-01	1400	330	10	.0	20.0	29.6	9.5	1.4	3	.6
81-07-07	1715	330	10.	.0	18.8	28.4	9.3	1.3	3	.5
81-07-15	1715	330	10	.0	18.8	24.4	8.8	.6	3	.5
81-10-06	1845	330	10	0	24.8	35.7	12.6	2.0	7	.5
81-12-09	1700	330	15	0	42.5	68.5	23.6	2.3	6	.7

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17205L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
81-06-15	1700	330	.3	.030	1.4	7.5	.014	--	--	--
81-06-22	1345	330	.3	.030	1.8	7.6	.002	--	--	--
81-07-01	1400	330	.2	.030	1.6	7.1	.003	--	--	--
81-07-07	1715	330	.2	.020	1.6	7.2	.029	--	--	--
81-07-15	1715	330	.4	.020	1.4	5.0	.015	--	--	--
81-10-06	1845	330	.3	.030	1.6	11.3	L.002	--	--	--
81-12-09	1700	330	.2	.500	2.6	24.5	.064	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
81-06-15	1700	330	L.0005C	110	41	110	41	--	.006	--
81-06-22	1345	330	.00100	77	62	74	44	--	.008	--
81-07-01	1400	330	.00080	58	55	96.	44.	--	.011	--
81-07-07	1715	330	.00080	30	59	30.	43.	--	.006	--
81-07-15	1715	330	.00100	340	41	330.	24.	--	.017	--
81-10-06	1845	330	--	L10.	61.	L10.	59	--	--	--
81-12-09	1700	330	.00430	L10.	108.	L10.	88.	--	.001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
81-06-15	1700	330	.0030	.0005	--	.080	--	.350	2.10	--
81-06-22	1345	330	.0020	.0005	--	.080	--	.012	2.40	--
81-07-01	1400	330	.0022	.0005	--	.110	--	.015	2.50	--
81-07-07	1715	330	.0024	.0005	--	.070	--	.010	2.00	--
81-07-15	1715	330	.0080	.0005	--	.170	--	.022	4.20	--
81-10-06	1845	330	.0056	.0008	--	--	--	--	--	--
81-12-09	1700	330	.0011	.0008	--	L.010	--	.018	.11	--

DETAILED WATER QUALITY DATA
1975 - 1981

STATION - 00AK08DC0001 LAT. 56D 1M 18S LONG. 130D 4M 17S
SALMON RIVER NEAR HYDER, ALASKA ABOVE CONFLUENCE WITH TEXAS CREEK 333.5 KM BELOW BC-ALASKA BOUNDARY

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
81-06-15	1700	330	--	L.001	--	--	--	--
81-06-22	1345	330	.0005	.004	--	--	--	--
81-07-01	1400	330	L.0005	.005	--	--	--	--
81-07-07	1715	330	L.0005	.003	--	--	--	--
81-07-15	1715	330	L.0005	.130	--	--	--	--
81-12-09	1700	330	.0005	.001	--	--	--	--

FOOTNOTE. L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN. L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08EC08CF0002 LAT. 56D 49M 45S LONG 131D 45M 50S
STIKINE RIVER ABOVE CHOQUETTE RIVER, 8.5 KM UPSTREAM OF CONFLUENCE WITH ISKUT RIVER
BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
81-06-05	1030	330	0	9.0	16.3	8.2	7.7	110	108	120.00
81-10-12	1525	330	7.5	5.0	18.8	--	7.5	160	160	80.00

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
81-06-05	1030	330	15.	.0	44.1	51.9	16.5	2.6	1.0	1.8
81-10-12	1525	330	5.	.0	68.9	79.4	22.0	5.9	.9	3.4

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
81-06-05	1030	330	.7	.040	5.3	6.6	035	138	10.7	5.3
81-10-12	1525	330	.8	.060	6.1	13.8	045	.273	18.0	1.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
81-06-05	1030	330	--	320.	61	300.	51	L.05	023	--
81-10-12	1525	330	.00000	160.	95.	140.	75.	L.05	013	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
81-06-05	1030	330	.0018	.0002	--	220	--	023	10.00	--
81-10-12	1525	330	.0015	.0003	--	.110	--	.002	5.30	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
81-04-17	1200	330	--	--	--	--	--	110.00
81-05-28	1200	330	--	--	--	--	3930.00	--
81-06-05	1030	330	L.0005	001	2500.00	--	--	--
81-10-12	1525	330	L.0005	005	395.00	--	--	--
81-12-31	1200	330	--	--	--	787.00	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08CG0001 LAT. 58D 44M 20S LONG. 131D 40M 23S
ISKUT RIVER BELOW JOHNSON RIVER ABOUT 8 KM FROM MOUTH, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG.C	02061S TEMP. WATER DEG.C.	02061L TEMP. WATER DEG.C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
80-06-01	1720	330	--	8.0	23.9	--	8.0	--	135.	83.00
81-06-05	1150	330	.0	8.0	16.5	8.2	7.7	130.	132.	104.00
81-07-21	1545	330	.0	10.0	19.9	8.2	7.5	110.	115.	180.00
81-10-12	1348	330	6.5	5.0	18.6	--	7.9	200.	194	7.30

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
80-06-01	1720	330	120	.0	52.6	63.8	20.6	3.0	1.1	2.2
81-06-05	1150	330	10	0	48.4	60.1	15.7	2.6	1.1	2.2
81-07-21	1545	330	10	0	44.8	57.2	18.4	2.7	1.1	1.2
81-10-12	1348	330	10	0	70.5	91.3	26.7	6.6	.9	3.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07E51L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
80-06-01	1720	330	1.0	.050	4.6	15.8	.073	--	--	--
81-06-05	1150	330	.8	050	4.2	15.0	040	072	11.5	2.6
81-07-21	1545	330	.7	040	3.1	11.0	021	065	11.4	1.9
81-10-12	1348	330	.9	.060	5.6	24.0	054	091	18.0	L1.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
80-06-01	1720	330	--	140.	91.	130.	74.	--	--	--
81-06-05	1150	330	--	190.	83.	180.	69.	L.05	.015	--
81-07-21	1545	330	--	700	83.	670	64.	L.01	026	--
81-10-12	1348	330	--	L10.	110.	L10	92.	.05	005	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
80-06-01	1720	330	.0011	.0003	--	--	--	--	--	--
81-06-05	1150	330	.0016	.0003	--	.160	--	.022	7.80	--
81-07-21	1545	330	.0048	.0004	--	.380	--	019	11.00	--
81-10-12	1348	330	.0004	.0004	--	.030	--	L.001	.88	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
80-03-06	1200	330	--	--	--	--	--	36.00
80-06-01	1720	330	--	--	778.00	--	--	--
80-10-06	1200	330	--	--	--	--	2990.00	--
80-12-31	1200	330	--	--	--	507.00	--	--
81-03-08	1200	330	--	--	--	--	--	73.60
81-06-05	1150	330	L.0005	.003	926.00	--	--	--
81-07-21	1545	330	L.0005	.004	1340.00	--	--	--
81-09-09	1200	330	--	--	--	--	3240.00	--
81-10-12	1348	330	L.0005	L.001	236.00	--	--	--
81-12-31	1200	330	--	--	--	546.00	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08HC08MF0001
FRASER RIVER AT HWY 1 BRIDGE. HOPE, BRITISH COLUMBIA LAT 49D 23M 12S LONG. 121D 26M 58S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG C	02061S TEMP. WATER DEG C.	02061L TEMP. WATER DEG C	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT USIE/CM	02073L TURBIDITY JTU
79-07-17	1330	330	--	17.5	20.5	--	8.0	--	102	48.00
79-10-10	1030	330	--	12.5	21.0	--	7.5	--	128	6.50
79-10-31	1130	330	--	9.0	20.6	--	7.8	--	132	3.30
79-11-20	1305	330	--	4.5	18.4	--	7.8	--	150	3.50
79-12-20	1300	330	--	4.0	18.6	--	7.7	--	88	56.00
80-02-08	1414	330	10.4	1.7	19.5	--	7.8	--	150	3.00
80-03-03	1410	330	15.0	3.8	19.9	--	8.0	--	145	7.00
80-03-26	1320	330	8.6	4.0	21.9	--	8.0	--	159	5.90
80-04-23	1413	330	15.7	6.3	22.2	--	7.7	--	111	60.00
80-05-27	1340	330	15.0	5.0	23.6	--	7.8	--	103	13.00
80-06-05	1414	330	14.8	11.0	23.7	--	7.8	--	104	23.00
80-06-17	1431	330	17.0	15.0	21.0	--	7.8	--	97	46.00
80-07-02	1625	330	20.0	15.3	21.3	--	7.8	--	105	42.00
80-07-28	1255	330	23.5	18.5	24.3	--	7.9	--	116	23.00
80-09-16	1305	330	23.0	14.2	21.4	--	7.9	--	125	5.00
80-10-29	0822	330	6.8	7.5	19.5	--	7.8	--	131	4.00
81-01-02	1224	330	7.0	2.5	21.4	--	7.8	--	120	6.00
81-01-21	1338	330	9.0	2.8	19.7	--	7.2	--	135	1.10
81-03-12	1311	330	19.0	6.5	19.3	--	7.2	--	143	4.00
81-03-31	1101	330	5.0	6.0	19.7	--	8.0	--	149	.45
81-05-05	1054	330	10.5	8.0	20.6	--	7.9	--	122	56.00
81-06-25	1123	330	22.5	14.5	20.8	--	7.7	--	107	17.00
81-08-13	1145	330	24.0	20.0	16.8	--	7.8	--	96	19.00
81-10-02	1414	330	0	0	20.0	--	7.5	--	108	13.00
81-10-15	1000	330	15.5	10.7	20.0	--	7.6	--	125	2.90
81-11-03	1540	330	12.5	8.7	21.8	--	7.5	--	123	3.40

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-17	1330	330	15.	0	44.9	50.2	15.4	2.9	.5	1.4
79-10-10	1030	330	5.	0	50.4	62.4	17.7	4.4	.7	3.4
79-10-31	1130	330	10.	0	53.0	63.5	17.6	4.8	.6	3.3
79-11-20	1305	330	15.	0	59.0	69.6	20.3	4.6	.7	4.5
79-12-20	1300	330	20.	.0	33.8	39.7	12.3	2.2	.8	2.4
80-02-08	1414	330	15.	0	63.0	72.0	21.2	4.6	.8	4.9
80-03-03	1410	330	20	0	57.0	63.3	19.3	3.7	.9	4.6
80-03-26	1320	330	20.	0	60.4	67.1	20.3	4.0	.9	5.3
80-04-23	1413	330	170	0	47.0	51.8	19.6	.6	.9	2.6
80-05-27	1340	330	40	.0	45.2	49.4	15.9	2.4	.6	2.1
80-06-05	1414	330	40	0	46.0	50.0	15.7	2.6	.6	2.0
80-06-17	1431	330	50	0	41.5	46.4	14.3	2.6	.5	1.6
80-07-02	1625	330	40	0	45.5	50.4	16.3	2.4	1.9	2.8
80-07-28	1255	330	30	0	50.5	55.2	17.0	3.1	.6	1.9
80-09-16	1305	330	20	.0	50.9	55.2	15.4	4.1	.6	2.1
80-10-29	0822	330	25	.0	53.8	58.4	19.2	2.5	.6	2.8
81-01-02	1224	330	35	.0	50.8	58.6	17.0	3.9	.7	2.4
81-01-21	1338	330	20	.0	56.7	64.6	18.2	4.7	.7	3.4
81-03-12	1311	330	25.	0	56.9	66.4	19.7	4.2	.7	3.8
81-03-31	1101	330	25.	.0	62.6	69.7	19.5	4.9	.8	4.1
81-05-05	1054	330	15.	.0	51.1	55.8	16.9	3.3	.7	2.5
81-06-25	1123	330	15.	.0	44.4	51.0	15.5	3.0	.5	2.0
81-08-13	1145	330	10.	.0	42.4	45.7	13.4	--	.5	1.3
81-10-02	1414	330	20	.0	41.4	53.0	14.1	4.3	.6	2.4
81-10-15	1000	330	20.	.0	49.7	59.0	14.1	5.8	.7	3.0
81-11-03	1540	330	20.	.0	47.6	51.6	14.5	3.7	.6	2.3

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08MF0001 LAT. 49D 23M 12S LONG 121D 26M 58S
FRASER RIVER AT HWY 1 BRIDGE. HOPE, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-17	1330	330	1.2	.050	3.9	6.3	.051	--	--	--
79-10-10	1030	330	4.7	.067	4.2	9.7	.042	--	--	--
79-10-31	1130	330	2.5	.059	5.0	10.2	.050	--	--	--
79-11-20	1305	330	4.1	.068	5.6	11.5	.035	--	--	--
79-12-20	1300	330	1.8	L.050	6.1	7.7	.087	--	--	--
80-02-08	1414	330	4.1	.057	6.9	12.4	.113	--	--	--
80-03-03	1410	330	3.9	.069	6.9	11.5	.117	--	--	--
80-03-26	1320	330	4.8	.056	6.8	12.3	.096	--	--	--
80-04-23	1413	330	2.0	L.050	5.8	6.4	.146	--	--	--
80-05-27	1340	330	1.6	L.050	4.8	6.3	.001	--	--	--
80-06-05	1414	330	1.4	L.050	4.8	6.3	.017	--	--	--
80-06-17	1431	330	1.0	L.050	4.6	6.4	.029	--	--	--
80-07-02	1625	330	1.2	L.050	5.3	5.5	.020	--	--	--
80-07-28	1255	330	1.0	L.050	4.3	6.3	.019	--	--	--
80-09-16	1305	330	1.3	.045	4.8	7.1	.036	--	--	--
80-10-29	0822	330	2.1	.050	5.3	8.9	.042	--	--	--
81-01-02	1224	330	1.8	.050	5.9	6.9	.118	--	--	--
81-01-21	1338	330	2.6	.050	6.2	8.9	.096	--	--	--
81-03-12	1311	330	2.7	.100	6.4	8.9	L.002	--	--	--
81-03-31	1101	330	3.0	.060	6.6	7.5	.072	--	--	--
81-05-05	1054	330	2.0	.040	6.3	5.3	.078	--	--	--
81-06-25	1123	330	1.0	.040	5.3	5.1	L.002	--	--	--
81-08-13	1145	330	.4	.030	4.3	6.1	.022	--	--	--
81-10-02	1414	330	1.6	.050	4.8	7.9	.066	--	--	--
81-10-15	1000	330	2.2	.050	5.1	8.8	.039	--	--	--
81-11-03	1540	330	1.3	.750	5.0	7.4	.063	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE CU MG/L	29306P COPPER EXTRBLE CU MG/L
79-07-17	1330	330	--	71.	61.	65.	51	--	--	--
79-10-10	1030	330	--	12.	86.	L10.	72	--	--	--
79-10-31	1130	330	--	L10.	92.	L10.	78	--	--	--
79-11-20	1305	330	--	L10.	96.	L10.	78.	--	--	--
79-12-20	1300	330	--	64.	69.	60.	36	--	--	--
80-02-08	1414	330	--	L10.	102.	L10.	72.	--	--	--
80-03-03	1410	330	--	L10.	85.	L10.	58.	--	--	--
80-03-26	1320	330	--	L10.	86.	L10.	56.	--	--	--
80-04-23	1413	330	--	189.	91.	179.	51.	--	--	--
80-05-27	1340	330	--	50.	75.	46.	52.	--	--	--
80-06-05	1414	330	--	71.	78.	68.	61.	--	--	--
80-06-17	1431	330	--	130.	70.	120.	48.	--	--	--
80-07-02	1625	330	--	110.	80.	99.	40.	--	--	--
80-07-28	1255	330	--	52.	83.	46.	73.	--	--	--
80-09-16	1305	330	--	L10.	103.	L10.	48.	--	--	--
80-10-29	0822	330	--	L10.	81.	L10.	66.	--	--	--
81-01-02	1224	330	--	78.	73.	75.	58.	--	--	--
81-01-21	1338	330	--	12.	86.	L10.	52.	--	--	--
81-03-12	1311	330	--	L10.	86.	L10.	59.	--	--	--
81-03-31	1101	330	--	36.	90.	34.	53.	--	--	--
81-05-05	1054	330	--	204.	81.	192.	62.	--	--	--
81-06-25	1123	330	--	56.	61.	50.	51.	--	--	--
81-08-13	1145	330	--	44.	71.	40.	59.	--	--	--
81-10-02	1414	330	--	27.	90.	18.	64.	--	--	--
81-10-15	1000	330	--	L10.	73.	L10.	58.	--	--	--
81-11-03	1540	330	--	L10.	65.	L10.	51	--	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08MC008MF0001 LAT 49D 23M 12S LONG 121D 26M 58S
FRASER RIVER AT HWY 1 BRIDGE, HOPE, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE FE MG/L	26305P IRON EXTRBLE FE MG/L
79-07-17	1330	330	.0010	L.0001	--	--	--	--	--	--
79-10-10	1030	330	.0006	L.0001	--	--	--	--	--	--
79-10-31	1130	330	.0005	L.0001	--	--	--	--	--	--
79-11-20	1305	330	.0008	.0001	--	--	--	--	--	--
79-12-20	1300	330	.0030	.0001	--	--	--	--	--	--
80-02-08	1414	330	.0009	.0002	--	--	--	--	--	--
80-03-03	1410	330	.0007	.0001	--	--	--	--	--	--
80-03-26	1320	330	.0008	.0001	--	--	--	--	--	--
80-04-23	1413	330	.0008	.0001	--	--	--	--	--	--
80-05-27	1340	330	.0003	L.0001	--	--	--	--	--	--
80-06-05	1414	330	.0004	L.0001	--	--	--	--	--	--
80-06-17	1431	330	.0006	L.0001	--	--	--	--	--	--
80-07-02	1625	330	.0003	L.0001	--	--	--	--	--	--
80-07-28	1255	330	.0004	L.0001	--	--	--	--	--	--
80-09-16	1305	330	.0004	L.0001	--	--	--	--	--	--
80-10-29	0822	330	.0004	L.0001	--	--	--	--	--	--
81-01-02	1224	330	.0010	L.0001	--	--	--	--	--	--
81-01-21	1338	330	.0005	L.0001	--	--	--	--	--	--
81-03-12	1311	330	.0004	.0001	--	--	--	--	--	--
81-03-31	1101	330	.0007	L.0001	--	--	--	--	--	--
81-05-05	1054	330	.0009	L.0001	--	--	--	--	--	--
81-06-25	1123	330	.0004	L.0001	--	--	--	--	--	--
81-08-13	1145	330	.0006	L.0001	--	--	--	--	--	--
81-10-02	1414	330	.0010	L.0001	--	--	--	--	--	--
81-10-15	1000	330	.0004	L.0001	--	--	--	--	--	--
81-11-03	1540	330	.0003	L.0001	--	--	--	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-07-17	1330	330	--	--	4870.00	--	--	--
79-10-10	1030	330	--	--	1410.00	--	--	--
79-10-31	1130	330	--	--	1210.00	--	--	--
79-11-20	1305	330	--	--	856.00	--	--	--
79-12-20	1300	330	--	--	1260.00	--	--	--
80-01-11	1200	330	--	--	--	--	--	538.00
80-02-08	1414	330	--	--	626.00	--	--	--
80-03-03	1410	330	--	--	694.00	--	--	--
80-03-26	1320	330	--	--	677.00	--	--	--
80-04-23	1413	330	--	--	2740.00	--	--	--
80-05-27	1340	330	--	--	4190.00	--	--	--
80-06-05	1414	330	--	--	4460.00	--	--	--
80-06-17	1431	330	--	--	5100.00	--	--	--
80-06-22	1200	330	--	--	--	--	6070.00	--
80-07-02	1625	330	--	--	5060.00	--	--	--
80-07-28	1255	330	--	--	3670.00	--	--	--
80-09-16	1305	330	--	--	2380.00	--	--	--
80-10-29	0822	330	--	--	1510.00	--	--	--
80-12-31	1200	330	--	--	--	2400.00	--	--
81-01-02	1224	330	--	--	2760.00	--	--	--
81-01-21	1338	330	--	--	1460.00	--	--	--
81-03-12	1311	330	--	--	1240.00	--	--	--
81-03-31	1101	330	--	--	1440.00	--	--	--
81-05-05	1054	330	--	--	3440.00	--	--	--
81-05-30	1200	330	--	--	--	--	8370.00	--
81-06-25	1123	330	--	--	5370.00	--	--	--
81-08-13	1145	330	--	--	3820.00	--	--	--
81-10-02	1414	330	--	--	1670.00	--	--	--
81-10-15	1000	330	--	--	1540.00	--	--	--
81-11-03	1540	330	--	--	1810.00	--	--	--
81-12-31	1200	330	--	--	--	2760.00	--	848.00

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08CC08MH0027 LAT. 49D 0M 10S LONG. 122D 13M 50S
SUMAS RIVER AT INTERNATIONAL BOUNDARY, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. US/E/CM	02041L SPECIFIC CONDUCT. US/E/CM	02073L TURBIDITY JTU
79-07-17	1030	330	26.0	19.0	20.6	--	7.9	--	273.	2.60
79-07-24	1636	330	23.0	20.0	20.3	--	8.2	--	262.	3.70
79-08-02	1420	330	--	20.0	20.7	--	8.0	--	283.	3.30
79-08-29	1200	330	20.5	17.0	20.7	--	7.9	--	272.	1.90
79-09-18	1146	330	22.0	15.5	21.3	--	7.9	--	282.	4.70
79-10-30	1050	330	--	9.5	20.6	--	7.6	--	281.	4.20
79-12-18	1502	330	--	7.0	18.7	--	7.3	--	150.	68.00
80-01-10	1505	330	-8.5	.5	19.5	--	7.7	--	300.	18.00
80-04-11	1530	330	18.0	10.5	22.4	--	7.9	--	234.	4.00
80-04-29	1119	330	10.0	11.5	19.9	--	7.8	--	263.	5.40
80-07-09	1400	330	21.0	18.0	21.4	--	7.9	--	283.	6.70
80-08-12	1050	330	--	--	21.1	--	8.1	--	289.	2.70
80-08-15	1345	330	18.5	15.5	19.4	--	8.0	--	284.	3.70
80-10-16	1603	330	14.0	9.0	21.4	--	8.0	--	288.	14.00
80-11-20	1530	330	7.0	8.0	22.6	--	7.5	--	281.	22.00
81-05-21	1532	330	14.5	12.5	22.6	--	7.7	--	288.	12.00
81-07-21	1724	330	18.5	15.0	18.1	--	7.9	--	293.	12.00
81-08-14	1033	330	24.0	17.0	17.1	--	7.7	--	294.	2.90
81-09-18	1019	330	--	--	20.9	--	7.8	--	283.	5.10
81-10-15	1137	330	14.0	9.0	20.7	--	7.7	--	295.	6.90
81-12-17	1048	330	4.5	4.0	19.4	--	7.3	--	256.	7.20

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-17	1030	330	15.	.0	105.2	116.0	24.5	13.3	1.6	11.4
79-07-24	1636	330	15.	.0	108.7	120.0	24.1	14.5	2.0	11.9
79-08-02	1420	330	10.	.0	101.0	115.0	25.9	12.2	1.9	12.5
79-08-29	1200	330	10.	.0	107.0	118.0	25.8	13.0	2.2	10.9
79-09-18	1146	330	30.	.0	108.0	120.0	26.6	13.0	2.4	10.7
79-10-30	1050	330	20.	.0	106.0	124.0	27.2	13.6	3.9	9.6
79-12-18	1502	330	40.	.0	39.7	60.0	10.6	8.1	5.5	3.1
80-01-10	1505	330	20.	.0	104.0	130.0	24.9	16.5	2.6	11.1
80-04-11	1530	330	30.	.0	82.7	104.0	18.7	13.9	2.3	6.7
80-04-29	1119	330	85.	.0	98.5	119.0	35.3	7.5	2.2	9.3
80-07-09	1400	330	45.	.0	110.0	124.0	34.1	9.4	2.2	9.2
80-08-12	1050	330	25.	.0	107.0	125.0	20.9	17.7	1.7	11.0
80-08-15	1345	330	25.	.0	102.0	121.0	21.2	16.5	1.9	10.8
80-10-16	1603	330	25.	.0	105.0	121.0	22.4	15.8	2.7	9.6
80-11-20	1530	330	100	.0	96.7	122.0	46.1	1.7	5.2	7.1
81-05-21	1532	330	30.	.0	106.0	120.0	22.6	15.4	1.9	9.5
81-07-21	1724	330	30.	.0	110.0	126.0	20.4	18.2	2.4	9.4
81-08-14	1033	330	20.	.0	108.0	123.0	23.6	15.6	1.9	11.0
81-09-18	1019	330	25.	.0	103.0	119.0	22.0	15.6	1.9	10.0
81-10-15	1137	330	35.	.0	108.0	131.0	22.0	18.5	3.0	9.0
81-12-17	1048	330	35.	.0	95.2	119.0	16.1	19.1	2.7	7.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-17	1030	330	18.0	.067	18.6	10.2	.870	--	--	--
79-07-24	1636	330	18.0	.055	18.6	10.6	.960	--	--	--
79-08-02	1420	330	19.8	.074	4.0	10.9	1.080	--	--	--
79-08-29	1200	330	16.2	.082	20.0	10.0	1.250	--	--	--
79-09-18	1146	330	17.2	.059	22.7	9.7	1.030	--	--	--
79-10-30	1050	330	14.5	.069	L.6	15.9	1.360	--	--	--
79-12-18	1502	330	7.7	.054	10.0	12.7	2.600	--	--	--
80-01-10	1505	330	19.3	.081	25.4	17.0	2.500	--	--	--
80-04-11	1530	330	11.4	.092	15.8	11.5	1.600	--	--	--
80-04-29	1119	330	15.3	L.050	19.3	11.5	1.530	--	--	--
80-07-09	1400	330	14.1	.064	42.5	10.7	1.260	--	--	--
80-08-12	1050	330	18.3	.052	18.7	11.0	1.310	--	--	--
80-08-15	1345	330	17.5	L.050	19.4	12.0	1.480	--	--	--
80-10-16	1603	330	15.3	.060	21.6	9.8	1.350	--	--	--
80-11-20	1530	330	13.3	.080	19.8	15.1	2.420	--	--	--
81-05-21	1532	330	14.8	.060	21.0	9.7	1.790	--	--	--
81-07-21	1724	330	14.5	.060	22.0	8.4	1.625	--	--	--
81-08-14	1033	330	17.3	.060	22.5	10.4	1.900	--	--	--
81-09-18	1019	330	15.5	.060	22.2	11.7	1.850	--	--	--
81-10-15	1137	330	15.2	.050	23.6	13.4	2.670	3.000	--	--
81-12-17	1048	330	13.2	.070	21.2	10.9	3.300	3.500	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08MH0027 LAT 490 0M 10S LONG 1220 13M 50S
SUMAS RIVER AT INTERNATIONAL BOUNDARY, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE CU MG/L
79-07-17	1030	330	--	L10.	171.	L10	113	--	--	--
79-07-24	1636	330	--	L10.	187.	L10	125.	--	--	--
79-08-02	1420	330	--	L10.	181.	L10	122	--	--	--
79-08-29	1200	330	--	L10.	225.	L10.	122	--	--	--
79-09-18	1146	330	--	L10.	185.	L10	141	--	--	--
79-10-30	1050	330	--	L10.	189.	L10	119.	--	--	--
79-12-18	1502	330	--	67.	110.	59	49.	--	--	--
80-01-10	1505	330	--	20.	205.	15	120	--	--	--
80-04-11	1530	330	--	43.	159.	38	85.	--	--	--
80-04-29	1119	330	--	15	175.	12	108	--	--	--
80-07-09	1400	330	--	L10.	190.	L10	110	--	--	--
80-08-12	1050	330	--	L10.	189.	L10.	145	--	--	--
80-08-15	1345	330	--	L10.	381.	L10.	124	--	--	--
80-10-16	1803	330	--	L10.	180.	L10	120	--	--	--
80-11-20	1530	330	--	36.	228.	28.	128.	--	--	--
81-05-21	1532	330	--	44.	186.	36.	125	--	--	--
81-07-21	1724	330	--	24.	183.	20.	109	--	--	--
81-08-14	1033	330	--	L10.	200.	L10.	130.	--	--	--
81-09-18	1019	330	--	L10.	190.	L10.	91.	--	--	--
81-10-15	1137	330	--	10.	200.	L10	130	L .05	010	--
81-12-17	1048	330	--	L10.	173.	L10	103	L .05	003	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-07-17	1030	330	.0009	.0001	--	--	--	--	--	--
79-07-24	1636	330	.0015	.0001	--	--	--	--	--	--
79-08-02	1420	330	.0011	.0001	--	--	--	--	--	--
79-08-29	1200	330	0011	L.0001	--	--	--	--	--	--
79-09-18	1146	330	0010	.0001	--	--	--	--	--	--
79-10-30	1050	330	0011	.0001	--	--	--	--	--	--
79-12-18	1502	330	0026	.0001	--	--	--	--	--	--
80-01-10	1505	330	.0011	.0002	--	--	--	--	--	--
80-04-11	1530	330	0009	L.0001	--	--	--	--	--	--
80-04-29	1119	330	.0009	.0001	--	--	--	--	--	--
80-07-09	1400	330	.0011	.0001	--	--	--	--	--	--
80-08-12	1050	330	.0011	.0001	--	--	--	--	--	--
80-08-15	1345	330	.0010	.0001	--	--	--	--	--	--
80-10-16	1803	330	0009	.0002	--	--	--	--	--	--
80-11-20	1530	330	.0015	.0001	--	--	--	--	--	--
81-05-21	1532	330	.0012	L.0001	--	--	--	--	--	--
81-07-21	1724	330	0011	L.0001	--	--	--	--	--	--
81-08-14	1033	330	.0008	.0001	--	--	--	--	--	--
81-09-18	1019	330	.0010	.0002	--	--	--	--	--	--
81-10-15	1137	330	0010	.0001	--	.090	--	002	1.40	--
81-12-17	1048	330	.0004	L.0001	--	.110	--	050	1.10	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08MH0027 LAT. 49D 0M 10S LONG. 122D 13M 50S
SUMAS RIVER AT INTERNATIONAL BOUNDARY, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-07-17	1030	330	--	--	.55	--	--	--
79-07-24	1636	330	--	--	.35	--	--	--
79-08-02	1420	330	--	--	.26	--	--	--
79-08-29	1200	330	--	--	.64	--	--	--
79-09-18	1146	330	--	--	.67	--	--	--
79-10-30	1050	330	--	--	.95	--	--	--
79-12-18	1502	330	--	--	25.10	--	--	--
80-01-10	1505	330	--	--	2.30	--	--	--
80-04-11	1530	330	--	--	5.73	--	--	--
80-04-29	1119	330	--	--	2.93	--	--	--
80-07-09	1400	330	--	--	1.79	--	--	--
80-08-12	1050	330	--	--	.76	--	--	--
80-08-13	1200	330	--	--	--	--	--	.70
80-08-15	1345	330	--	--	.76	--	--	--
80-10-16	1603	330	--	--	1.02	--	--	--
80-11-20	1530	330	--	--	5.45	--	--	--
80-12-27	1200	330	--	--	--	--	27.10	--
80-12-31	1200	330	--	--	--	3.30	--	--
81-05-21	1532	330	--	--	2.60	--	--	--
81-06-11	1200	330	--	--	--	--	16.30	--
81-07-21	1724	330	--	--	2.37	--	--	--
81-08-14	1033	330	--	--	1.1E	--	--	--
81-08-18	1200	330	--	--	--	--	--	1.02
81-09-18	1019	330	--	--	1.05	--	--	--
81-10-15	1137	330	L.0005	.002	2.01	--	--	--
81-12-17	1048	330	L.0005	L.000	5.19	--	--	--
81-12-31	1200	330	--	--	--	3.98	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NE0001 LAT 49D 1M 39S LONG 117D 38M 11S
COLUMBIA RIVER BELOW TRAIL, 1.8 KM NORTH OF WANETA POWER DAM. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG.C	02061S TEMP. WATER DEG.C	02061L TEMP. WATER DEG.C	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-09-20	0800	330	--	17.0	22.1	--	7.6	--	122	.82
79-11-02	1555	330	--	10.0	20.7	--	7.8	--	154	.95
80-01-23	1515	330	--	3.0	19.4	--	7.7	--	152	.75
80-03-26	1348	330	--	4.5	21.7	--	7.8	--	180	.95
80-10-08	1310	330	19.0	16.0	22.4	--	7.9	--	137	.87
80-12-30	1450	330	6.5	5.0	21.5	--	7.8	--	140	.24
81-02-17	0915	330	7.0	4.0	20.5	--	7.5	--	144	.29
81-05-12	1055	330	--	--	21.7	--	7.8	--	149	.65
81-05-15	1055	330	--	--	21.4	--	7.8	--	152	1.20
81-08-19	1450	330	32.0	18.0	19.4	--	7.7	--	116	.40
81-11-20	1201	330	7.0	8.0	21.2	--	7.7	--	145	.62

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-09-20	0800	330	5	0	48.2	60.8	18.0	3.8	.6	1.2
79-11-02	1555	330	L5	0	54.7	75.8	21.8	5.2	.5	1.6
80-01-23	1515	330	5	0	59.4	76.0	22.5	4.8	.7	1.5
80-03-26	1348	330	L5	0	61.8	84.6	27.0	4.2	.7	2.0
80-10-08	1310	330	10	0	49.2	66.2	21.3	3.2	.5	1.5
80-12-30	1450	330	5	0	56.7	69.5	20.3	4.6	.6	1.3
81-02-17	0915	330	5	0	56.3	70.5	20.1	4.9	.6	1.3
81-05-12	1055	330	10	0	57.8	69.3	20.8	4.2	.6	1.7
81-05-15	1055	330	10	0	56.5	70.9	21.8	4.0	.6	1.8
81-08-19	1450	330	5	0	48.6	55.6	15.7	4.0	.3	1.1
81-11-20	1201	330	5	0	54.1	72.3	18.9	6.1	.5	1.3

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-09-20	0800	330	.8	.125	3.0	11.9	057	--	--	--
79-11-02	1555	330	1.2	.190	3.4	20.0	062	--	--	--
80-01-23	1515	330	.9	.230	4.0	17.1	142	--	--	--
80-03-26	1348	330	1.7	.240	4.4	25.0	136	--	--	--
80-10-08	1310	330	1.2	.120	3.4	19.7	041	--	--	--
80-12-30	1450	330	.7	.110	4.1	12.2	134	--	--	--
81-02-17	0915	330	.8	.110	4.2	12.5	170	--	--	--
81-05-12	1055	330	1.2	.120	4.9	11.9	.091	--	--	--
81-05-15	1055	330	1.0	.190	4.9	14.7	.079	--	--	--
81-08-19	1450	330	.5	.110	3.7	9.2	075	141	12.3	L.1
81-11-20	1201	330	.8	2.600	3.9	14.1	093	189	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-09-20	0800	330	--	L10.	77.	L10.	55.	--	--	--
79-11-02	1555	330	--	L10.	84.	L10.	68.	--	--	--
80-01-23	1515	330	--	L10.	98.	L10.	71.	--	--	--
80-03-26	1348	330	--	L10.	109.	L10.	84.	--	--	--
80-10-08	1310	330	--	L10.	90.	L10.	74.	--	--	--
80-12-30	1450	330	--	L10.	83.	L10.	73.	--	--	--
81-02-17	0915	330	--	L10.	95.	L10.	61.	--	--	--
81-05-12	1055	330	--	L10.	79.	L10.	62.	--	--	--
81-05-15	1055	330	--	L10.	91.	L10.	70.	--	--	--
81-08-19	1450	330	--	L10.	110.	L10.	53.	.05	002	--
81-11-20	1201	330	-	L10.	101.	L10.	70.	L.05	004	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NE0001 LAT. 49D 1M 39S LONG. 117D 36M 11S
COLUMBIA RIVER BELOW TRAIL, 1.8 KM NORTH OF WANETA POWER DAM. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-09-20	0800	330	.0003	L.0001	--	--	--	--	--	--
79-11-02	1555	330	.0007	.0001	--	--	--	--	--	--
80-01-23	1515	330	.0005	.0002	--	--	--	--	--	--
80-03-26	1348	330	.0009	.0001	--	--	--	--	--	--
80-10-08	1310	330	.0006	.0002	--	--	--	--	--	--
80-12-30	1450	330	.0004	.0001	--	--	--	--	--	--
81-02-17	0915	330	.0003	L.0001	--	--	--	--	--	--
81-05-12	1055	330	.0005	L.0001	--	--	--	--	--	--
81-05-15	1055	330	.0005	.0001	--	--	--	--	--	--
81-08-19	1450	330	.0002	.0001	--	.010	--	.070	--	.050
81-11-20	1201	330	.0003	.0001	--	.010	--	.030	.08	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-09-20	0800	330	--	--	1540.00	--	--	--
79-11-02	1555	330	--	--	1200.00	--	--	--
80-01-23	1515	330	--	--	1470.00	--	--	--
80-03-26	1348	330	--	--	811.00	--	--	--
80-10-08	1310	330	--	--	1110.00	--	--	--
80-12-30	1450	330	--	--	3090.00	--	--	--
81-02-17	0915	330	--	--	2580.00	--	--	--
81-04-18	1200	330	--	--	--	--	--	555.00
81-05-12	1055	330	--	--	1570.00	--	--	--
81-05-15	1055	330	--	--	1640.00	--	--	--
81-07-07	1200	330	--	--	--	--	4790.00	--
81-08-19	1450	330	.0005	.002	3530.00	--	--	--
81-11-20	1201	330	L.0005	.005	1700.00	--	--	--
81-12-31	1200	330	--	--	--	2280.00	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08EC08NE0010 LAT 49D 0M 55S LONG 117D 56M 39S
BIG SHEEP CREEK, 12.7 KM SW OF ROSSLAND AT OLD CASCADE HWY BRIDGE. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG C	02061S TEMP WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-10-04	1000	330	8.0	6.5	21.1	--	7.5	--	111	90
80-01-16	1048	330	1.0	.5	19.4	--	7.7	--	104	1.10
80-02-21	1300	330	3.0	40.5	20.1	--	7.8	--	102	1.30
80-04-08	1435	330	7.0	2.0	20.6	--	8.0	--	80.	68
80-05-01	1344	330	26.0	6.5	22.4	--	7.2	--	47	2.40
80-05-15	1315	330	16.0	6.0	20.3	--	7.4	--	52.	75
80-07-08	1100	330	22.0	13.0	21.6	--	7.6	--	90	58
80-10-08	0956	330	17.0	8.5	22.3	--	7.8	--	99	75
80-11-20	1155	330	1.0	3.5	20.0	--	7.6	--	103.	64
81-01-02	1340	330	1.5	2.0	18.0	--	7.6	--	86	64
81-02-06	1330	330	--	1.0	20.1	--	7.1	--	88	32
81-04-13	1309	330	9.5	3.5	20.0	--	7.9	--	94	45
81-05-13	1030	330	19.0	6.0	22.7	--	7.4	--	64	85
81-07-20	1045	330	16.0	10.0	15.8	--	7.7	--	80	43
81-09-25	1437	330	12.0	7.0	21.8	--	7.6	--	104	70
81-10-30	1430	330	5.0	5.0	21.7	--	7.5	--	99	38

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-10-04	1000	330	5.	.0	50.2	56.7	16.8	3.6	7	1.8
80-01-16	1048	330	5.	.0	47.4	48.1	15.5	2.3	7	2.0
80-02-21	1300	330	5.	0	47.2	46.6	15.5	1.9	.6	1.8
80-04-08	1435	330	5.	.0	40.0	42.0	13.9	1.8	.5	1.7
80-05-01	1344	330	30.	0	18.1	20.7	8.0	.2	.5	1.3
80-05-15	1315	330	20.	.0	20.4	22.9	9.0	.1	.5	1.2
80-07-08	1100	330	15.	0	40.1	41.6	13.9	1.7	.6	1.8
80-10-08	0956	330	10.	.0	47.1	45.4	14.7	3.1	.7	1.9
80-11-20	1155	330	10.	0	4.0	44.8	14.0	2.4	.6	1.9
81-01-02	1340	330	15.	.0	36.2	37.4	12.0	1.8	.5	1.6
81-02-06	1330	330	10.	0	37.6	43.4	12.9	2.7	.6	1.7
81-04-13	1309	330	10.	0	40.5	44.1	14.2	2.1	.5	1.7
81-05-13	1030	330	15.	.0	25.5	27.3	8.9	1.2	.4	1.4
81-07-20	1045	330	10	.0	35.3	36.7	10.6	2.5	.3	1.6
81-09-25	1437	330	15.	.0	47.6	47.6	13.4	3.4	.5	1.9
81-10-30	1430	330	15.	0	43.8	47.6	14.1	3.0	.7	1.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-10-04	1000	330	.5	.148	13.0	4.5	L.002	--	--	--
80-01-16	1048	330	.4	.125	12.9	5.3	.044	--	--	--
80-02-21	1300	330	.3	.142	12.5	4.6	.038	--	--	--
80-04-08	1435	330	.5	.120	.5	4.3	.052	--	--	--
80-05-01	1344	330	1.0	.080	9.5	3.2	.010	--	--	--
80-05-15	1315	330	.5	.070	9.8	3.0	L.002	--	--	--
80-07-08	1100	330	.7	.115	12.2	3.4	004	--	--	--
80-10-08	0956	330	.5	080	13.2	4.3	L.002	--	--	--
80-11-20	1155	330	.6	110	12.6	4.0	.030	--	--	--
81-01-02	1340	330	.5	.120	11.6	4.5	.050	--	--	--
81-02-06	1330	330	.6	110	11.5	4.4	.026	--	--	--
81-04-13	1309	330	.5	110	11.9	4.3	.022	--	--	--
81-05-13	1030	330	.4	.090	10.5	3.9	006	--	--	--
81-07-20	1045	330	.3	.100	11.7	3.1	L.002	--	--	--
81-09-25	1437	330	.4	.120	12.8	3.5	.123	.132	--	--
81-10-30	1430	330	.7	1.450	11.9	3.7	.019	.083	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 008CG8NE0010 LAT. 49D 0M 55S LONG. 117D 58M 39S
BIG SHEEP CREEK, 12.7 KM SW OF ROSSLAND AT OLD CASCADE HWY BRIDGE. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY XTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-10-04	1000	330	--	L10.	82.	L10.	67.	--	--	--
80-01-16	1048	330	--	L10.	86.	L10.	66.	--	--	--
80-02-21	1300	330	--	L10.	74.	L10.	72.	--	--	--
80-04-08	1435	330	--	L10.	73.	L10.	59.	--	--	--
80-05-01	1344	330	--	L10.	54.	L10.	20.	--	--	--
80-05-15	1315	330	--	L10.	80.	L10.	45.	--	--	--
80-07-08	1100	330	--	L10.	73.	L10.	40.	--	--	--
80-10-08	0958	330	--	L10.	73.	L10.	64.	--	--	--
80-11-20	1155	330	--	L10.	81.	L10.	53.	--	--	--
81-01-02	1340	330	--	L10.	119.	L10.	35.	--	--	--
81-02-06	1330	330	--	L10.	68.	L10.	51.	--	--	--
81-04-13	1309	330	--	L10.	66.	L10.	46.	--	--	--
81-05-13	1030	330	--	L10.	58.	L10.	41.	--	--	--
81-07-20	1045	330	--	L10.	58.	L10.	31.	--	--	--
81-09-25	1437	330	--	L10.	70.	L10.	53.	L .05	L .001	--
81-10-30	1430	330	--	L10.	70.	L10.	66.	L .05	.004	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-10-04	1000	330	.0002	L .0001	--	--	--	--	--	--
80-01-16	1048	330	.0001	L .0001	--	--	--	--	--	--
80-02-21	1300	330	.0001	.0001	--	--	--	--	--	--
80-04-08	1435	330	.0001	L .0001	--	--	--	--	--	--
80-05-01	1344	330	.0001	L .0001	--	--	--	--	--	--
80-05-15	1315	330	.0001	.0001	--	--	--	--	--	--
80-07-08	1100	330	.0001	L .0001	--	--	--	--	--	--
80-10-08	0956	330	.0001	L .0001	--	--	--	--	--	--
80-11-20	1155	330	.0001	L .0001	--	--	--	--	--	--
81-01-02	1340	330	L .0001	L .0001	--	--	--	--	--	--
81-02-06	1330	330	L .0001	L .0001	--	--	--	--	--	--
81-04-13	1309	330	.0001	L .0001	--	--	--	--	--	--
81-05-13	1030	330	L .0001	L .0001	--	--	--	--	--	--
81-07-20	1045	330	.0001	L .0001	--	--	--	--	--	--
81-09-25	1437	330	.0003	L .0001	--	.010	--	.080	.25	--
81-10-30	1430	330	L .0001	L .0001	--	.170	--	.007	1.40	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-10-04	1000	330	--	--	.52	--	--	--
80-01-16	1048	330	--	--	.54	--	--	--
80-01-31	1200	330	--	--	--	--	--	.46
80-02-21	1300	330	--	--	.56	--	--	--
80-04-08	1435	330	--	--	4.96	--	--	--
80-04-29	1200	330	--	--	--	--	74.20	--
80-05-01	1344	330	--	--	56.90	--	--	--
80-05-15	1315	330	--	--	27.00	--	--	--
80-07-08	1100	330	--	--	2.50	--	--	--
80-10-08	0956	330	--	--	.90	--	--	--
80-11-20	1155	330	--	--	1.60	--	--	--
80-12-31	1200	330	--	--	--	6.51	--	--
81-01-02	1340	330	--	--	5.53	--	--	--
81-02-06	1330	330	--	--	3.46	--	--	--
81-04-13	1309	330	--	--	5.46	--	--	--
81-05-13	1030	330	--	--	18.80	--	--	--
81-05-28	1200	330	--	--	--	--	55.40	--
81-07-20	1045	330	--	--	7.28	--	--	--
81-09-25	1437	330	L .0005	L .001	.92	--	--	--
81-09-28	1200	330	--	--	--	--	--	.84
81-10-30	1430	330	L .0005	.002	2.40	--	--	--
81-12-31	1200	330	--	--	--	8.18	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NE0020 LAT. 49D 1M 23S LONG 117D 22M 9S
PEND D'OREILLE RIVER BELOW INTERNATIONAL BOUNDARY BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97065S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
80-09-25	1520	330	18.0	15.0	21.1	--	8.1	--	171	74
80-10-09	1352	330	19.0	15.0	22.2	--	8.1	--	184	.64
81-02-17	1623	330	5.0	3.0	18.7	--	7.8	--	167	.87
81-05-14	1338	330	21.0	10.0	22.6	--	8.0	--	153	2.00
81-08-19	1414	330	32.0	24.0	18.8	--	8.3	--	155	.40
81-09-24	1505	330	14.0	17.0	22.0	--	8.1	--	169	1.00
81-11-19	1350	330	5.5	7.0	21.2	--	7.9	--	179	.35
81-11-20	1227	330	7.5	6.5	21.3	--	7.9	--	179	.40

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
80-09-25	1520	330	10.	0	79.2	82.6	23.2	6.0	.8	3.0
80-10-09	1352	330	5.	0	80.6	84.0	22.7	6.6	.8	3.0
81-02-17	1623	330	10.	0	78.5	86.2	22.7	7.2	.8	2.8
81-05-14	1338	330	10.	0	67.5	72.0	20.9	4.8	.6	2.7
81-08-19	1414	330	10.	0	72.4	70.4	20.4	6.9	.5	2.3
81-09-24	1505	330	10.	0	78.6	80.0	20.4	7.1	.5	2.5
81-11-19	1350	330	L5.	0	77.2	87.3	22.0	7.9	.7	2.7
81-11-20	1227	330	L5.	0	75.4	87.3	22.0	7.9	.7	2.6

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
80-09-25	1520	330	1.3	.060	6.2	9.2	.002	--	--	--
80-10-09	1352	330	1.1	.070	6.4	9.5	L.002	--	--	--
81-02-17	1623	330	.8	.070	7.3	9.1	.043	--	--	--
81-05-14	1338	330	.8	.070	6.9	7.1	.003	--	--	--
81-08-19	1414	330	.6	.080	6.4	6.6	.007	.105	19.2	1.6
81-09-24	1505	330	.7	.070	5.5	6.1	.051	.094	--	--
81-11-19	1350	330	.8	1.300	6.8	7.7	.004	.100	--	--
81-11-20	1227	330	.8	1.350	6.8	7.7	.007	.084	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
80-09-25	1520	330	--	L10.	102.	L10.	71.	--	--	--
80-10-09	1352	330	--	L10.	100.	L10.	79.	--	--	--
81-02-17	1623	330	--	L10.	128.	L10.	90.	--	--	--
81-05-14	1338	330	--	L10.	100.	L10.	70.	--	--	--
81-08-19	1414	330	--	L10.	130.	L10.	67.	L.05	.002	--
81-09-24	1505	330	--	L10.	96.	L10.	75.	L.05	L.001	--
81-11-19	1350	330	--	L10.	81.	L10.	75.	L.05	.001	--
81-11-20	1227	330	--	L10.	81.	L10.	77.	L.05	.001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
80-09-25	1520	330	.0011	.0001	--	--	--	--	--	--
80-10-09	1352	330	.0012	L.0001	--	--	--	--	--	--
81-02-17	1623	330	.0008	L.0001	--	--	--	--	--	--
81-05-14	1338	330	.0007	L.0001	--	--	--	--	--	--
81-08-19	1414	330	.0008	.0001	--	.020	--	.007	--	.037
81-09-24	1505	330	.0015	L.0001	--	.020	--	.030	.07	--
81-11-19	1350	330	.0007	L.0001	--	L.010	--	.016	.05	--
81-11-20	1227	330	.0007	L.0001	--	.010	--	.002	.06	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NE0020 LAT. 49D 1M 23S LONG. 117D 22M 9S
PEND D'OREILLE RIVER BELOW INTERNATIONAL BOUNDARY BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
80-02-24	1200	330	--	--	--	--	--	143.00
80-05-30	1200	330	--	--	--	--	2820.00	--
80-09-25	1520	330	--	--	3x3.00	--	--	--
80-10-08	1352	330	--	--	796.00	--	--	--
80-12-31	1200	330	--	--	--	694.00	--	--
81-02-17	1623	330	--	--	821.00	--	--	--
81-05-14	1338	330	--	--	1100.00	--	--	--
81-05-28	1200	330	--	--	--	--	3000.00	--
81-08-19	1414	330	.0005	.002	309.00	--	--	--
81-08-23	1200	330	--	--	--	--	--	141.00
81-09-24	1505	330	L.0005	L.001	555.00	--	--	--
81-11-19	1350	330	L.0005	L.001	501.00	--	--	--
81-11-20	1227	330	L.0005	L.001	595.00	--	--	--
81-12-31	1200	330	--	--	--	858.00	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NE0029 LAT. 49D 0M 11S LONG. 117D 37M 0S
PEND D'OREILLE RIVER BELOW WANETA POWER DAM AT RAILWAY BRIDGE. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C	02061L TEMP. WATER DEG. C	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-11-02	1440	330	--	8.8	20.6	--	8.0	--	169	1.00
80-01-23	1500	330	--	1.5	19.5	--	7.9	--	173	.70
80-03-26	1359	330	--	7.0	21.6	--	8.1	--	164	2.70
80-09-22	1830	330	15.0	17.0	18.6	7.9	8.1	170	168	.94
80-10-08	1300	330	19.0	15.0	22.3	--	8.2	--	174	.57
80-12-30	1435	330	6.5	2.5	21.4	--	8.0	--	172	.35
81-02-17	0850	330	9.0	2.0	20.4	--	7.8	--	177	.68
81-05-12	1025	330	--	--	21.7	--	8.0	--	150	.97
81-05-15	1130	330	--	--	21.6	--	8.0	--	148	2.00

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-11-02	1440	330	L5.	.0	79.2	91.3	23.5	7.9	8	2.8
80-01-23	1500	330	L5.	.0	79.9	85.2	23.9	6.2	9	2.9
80-03-26	1359	330	5.	.0	74.8	79.5	22.7	5.5	8	2.6
80-09-22	1830	330	10.	.0	76.1	80.4	22.7	5.8	9	2.9
80-10-08	1300	330	10.	.0	80.1	84.2	23.8	6.0	8	3.0
80-12-30	1435	330	5	.0	75.1	81.6	23.0	5.9	7	2.8
81-02-17	0850	330	5.	.0	77.7	87.3	23.4	7.0	7	2.7
81-05-12	1025	330	10.	.0	66.3	70.3	20.3	4.8	6	2.5
81-05-15	1130	330	10.	.0	65.7	68.7	20.3	4.4	6	2.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-11-02	1440	330	1.0	.074	6.6	11.5	006	--	--	--
80-01-23	1500	330	.9	.160	6.9	10.3	029	--	--	--
80-03-26	1359	330	1.1	.078	7.1	9.2	.004	--	--	--
80-09-22	1830	330	1.1	.060	5.5	9.3	.009	--	--	--
80-10-08	1300	330	1.1	.050	6.6	9.6	L.002	--	--	--
80-12-30	1435	330	1.0	.080	7.0	9.8	042	--	--	--
81-02-17	0850	330	1.0	.070	7.1	9.0	.050	--	--	--
81-05-12	1025	330	.7	.170	6.8	7.7	.004	--	--	--
81-05-15	1130	330	.8	.070	6.8	7.8	.007	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	0401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-11-02	1440	330	--	L10.	100.	L10.	87.	--	--	--
80-01-23	1500	330	--	L10.	116.	L10.	94.	--	--	--
80-03-26	1359	330	--	L10.	92.	L10.	82.	--	--	--
80-09-22	1830	330	--	L10.	94.	L10.	62.	--	--	--
80-10-08	1300	330	--	L10.	100.	L10.	79.	--	--	--
80-12-30	1435	330	--	L10.	93.	L10.	84.	--	--	--
81-02-17	0850	330	--	L10.	126.	L10.	77.	--	--	--
81-05-12	1025	330	--	L10.	107.	L10.	70.	--	--	--
81-05-15	1130	330	--	L10.	91.	L10.	74.	--	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-11-02	1440	330	.0011	L.0001	--	--	--	--	--	--
80-01-23	1500	330	.0011	L.0001	--	--	--	--	--	--
80-03-26	1359	330	.0007	L.0001	--	--	--	--	--	--
80-09-22	1830	330	.0011	L.0001	--	--	--	--	--	--
80-10-08	1300	330	.0010	.0002	--	--	--	--	--	--
80-12-30	1435	330	.0010	.0001	--	--	--	--	--	--
81-02-17	0850	330	.0010	L.0001	--	--	--	--	--	--
81-05-12	1025	330	.0008	L.0001	--	--	--	--	--	--
81-05-15	1130	330	.0008	L.0001	--	--	--	--	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 008CO8NE0029 LAT. 49D 0M 11S LONG. 117D 37M 0S
PEND D'OREILLE RIVER BELOW WANETA POWER DAM AT RAILWAY BRIDGE. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-11-02	1440	330	--	--	523.86	--	--	--
80-01-23	1500	330	--	--	402.10	--	--	--
80-02-24	1200	330	--	--	--	--	--	96.28
80-03-26	1359	330	--	--	543.68	--	--	--
80-05-30	1200	330	--	--	--	--	2746.70	--
80-09-22	1830	330	--	--	512.53	--	--	--
80-10-08	1300	330	--	--	869.33	--	--	--
80-12-30	1435	330	--	--	206.71	--	--	--
81-02-17	0850	330	--	--	787.21	--	--	--
81-05-12	1025	330	--	--	1111.00	--	--	--
81-05-15	1130	330	--	--	1166.60	--	--	--
81-05-27	1200	330	--	--	--	--	3080.90	--
81-09-06	1200	330	--	--	--	--	--	178.40

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 008C08NG0002 LAT 49D 25M 17S LONG 115D 25M 10S
KOOTENAY RIVER AT HWY 3 CROSSING. WARDNER, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-07-24	0830	330	--	15.5	20.3	--	8.2	--	210	7.30
79-10-15	0815	330	--	8.5	19.2	--	8.1	--	331	1.70
79-11-21	1430	330	--	.5	20.8	--	8.1	--	375	1.80
80-01-21	1330	330	--	.0	19.5	--	8.0	--	376	1.80
80-03-21	1400	330	--	5.0	20.4	--	8.1	--	402	4.00
80-04-16	1430	331	18.5	9.0	22.0	--	8.0	--	370	5.50
80-04-23	1400	330	22.5	10.0	22.2	--	7.8	--	253	3.20
80-04-25	1320	330	18.0	7.0	21.8	--	7.9	--	21.	16.00
80-04-30	1400	331	21.0	7.0	20.0	--	8.0	--	160	74.00
80-05-13	1430	331	23.0	9.5	20.2	--	8.0	--	185	12.00
80-05-21	1400	331	28.0	9.5	21.0	--	8.0	--	158	18.00
80-05-29	1245	330	13.0	8.0	21.4	--	8.1	--	212	18.00
	1339	331	14.0	9.0	20.4	--	8.0	--	195	27.00
80-06-04	1323	331	10.0	7.0	21.0	--	8.0	--	202	23.00
80-06-12	1230	331	24.0	11.0	24.2	--	8.1	--	193	68.00
80-06-18	1323	331	25.5	11.0	21.3	--	8.1	--	188	35.00
80-06-25	1400	331	18.0	11.0	21.1	--	8.1	--	192	22.00
80-06-26	1210	330	13.0	10.0	21.1	--	8.1	--	200	19.00
80-07-03	1430	331	24.0	14.5	21.1	--	8.1	--	224	7.70
80-07-09	1430	331	33.0	15.5	21.4	--	8.1	--	232	4.50
80-07-16	1325	331	22.0	15.0	21.4	--	8.1	--	226	3.90
80-07-23	1430	331	30.0	17.0	23.8	--	8.1	--	244	2.90
80-07-24	1810	330	26.0	17.5	23.8	--	8.0	--	241	3.90
	1815	330	26.0	17.5	23.4	--	8.1	--	244	4.00
80-08-03	1230	331	21.0	10.0	21.3	--	8.2	--	249	.62
80-08-07	1320	331	24.0	16.0	24.5	--	8.3	--	267	1.40
80-08-09	1037	330	27.0	15.0	22.1	8.6	8.2	280	282	2.20
80-08-13	1340	331	30.0	14.0	22.2	--	8.3	--	284	.38
80-08-20	1400	331	24.0	16.1	21.3	--	8.1	--	254	2.80
80-08-27	1440	330	10.0	14.0	21.5	--	8.1	--	285	2.20
80-09-16	1440	330	--	--	22.3	--	8.2	--	265	1.70
80-09-26	1240	330	16.0	10.0	19.2	--	8.1	--	263	.78
80-10-15	1430	331	16.0	7.0	21.8	--	8.3	--	287	.65
80-10-18	1144	330	10.5	10.0	21.4	8.4	8.1	340	306	.68
80-10-24	1220	330	11.0	5.0	19.7	--	8.1	--	323	2.00
80-11-26	1420	331	1.0	--	22.7	--	8.2	--	341	.90
80-11-27	1245	330	2.5	--	21.2	--	8.1	--	355	1.50
80-12-03	1231	330	-8.5	.5	22.8	8.8	8.2	380	336	1.30
81-01-13	1230	331	-4.0	--	19.8	--	8.1	--	309	.77
81-02-04	1010	330	-9.0	--	19.9	--	7.7	--	356	.78
81-02-12	1201	330	-10.0	.5	16.3	7.5	8.1	370	370	.65
81-04-03	1410	330	3.5	6.0	18.7	--	8.2	--	332	.86
81-04-08	1257	330	8.0	7.0	18.5	8.5	8.3	320	330	.31
81-04-30	1400	330	22.0	8.5	21.1	--	8.1	--	258	2.50
81-08-25	0840	330	23.0	15.0	21.4	--	8.2	--	242	.60
81-10-27	1030	330	8.5	6.0	21.5	--	8.1	--	321	1.20
81-11-25	1050	330	-2.0	2.0	21.4	--	8.2	--	315	.85

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - **08CC08NG0002** LAT. 49D 25M 17S LONG. 115D 25M 10S
KOOTENAY RIVER AT HWY 3 CROSSING. WARDNER, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-24	0830	330	10.	.0	84.1	101.0	28.6	7.2	.5	3.1
79-10-15	0815	330	10.	.0	115.0	166.0	45.5	12.7	.5	6.4
79-11-21	1430	330	25.	.0	126.0	177.0	47.2	14.4	.7	9.5
80-01-21	1330	330	30.	.0	127.0	180.0	49.7	13.6	.7	9.5
80-03-21	1400	330	20.	.0	124.0	185.0	50.3	14.4	.8	12.1
80-04-16	1430	331	30.	.0	119.0	182.0	52.6	12.3	.9	8.3
80-04-23	1400	330	30.	.0	94.0	121.0	35.1	8.1	.6	5.5
80-04-25	1320	330	60.	.0	75.9	102.0	28.8	7.3	.7	4.3
80-04-30	1400	331	200.	.0	78.6	81.0	26.6	3.5	.6	1.0
80-05-13	1430	331	40	.0	73.7	89.7	29.3	4.0	.4	2.3
80-05-21	1400	331	20	.0	68.3	78.2	25.9	3.3	.3	1.9
80-05-29	1245	330	15	.0	96.8	111.0	32.7	7.1	.3	1.3
	1339	331	30	.0	86.9	96.7	29.1	5.8	.5	2.1
80-06-04	1323	331	30	.0	88.1	101.7	29.5	6.9	.3	2.0
80-06-12	1230	331	50.	.0	92.0	98.3	29.3	6.1	.3	1.9
80-06-18	1323	331	30	.0	90.9	102.0	23.9	10.3	.3	1.4
80-06-25	1400	331	10.	.0	84.3	97.3	27.9	6.7	.8	1.2
80-06-26	1210	330	5	.0	82.2	98.1	27.7	7.0	.3	2.2
80-07-03	1430	331	5	.0	87.3	116.0	26.3	10.0	.4	2.9
80-07-09	1430	331	15	.0	91.6	113.0	32.3	7.9	.5	3.5
80-07-16	1325	331	10	.0	86.5	109.0	30.4	8.0	.4	3.1
80-07-23	1430	331	20	.0	90.1	117.0	32.3	8.8	.4	3.6
80-07-24	1810	330	20.	.0	89.9	116.0	31.5	9.1	.3	3.5
	1815	330	15.	.0	92.8	117.0	33.1	8.3	.3	3.2
80-08-03	1230	331	5.	.0	117.0	140.0	45.2	6.6	.4	8
80-08-07	1320	331	15	.0	99.4	127.0	36.0	9.0	.4	4.0
80-08-09	1037	330	15.	.0	99.0	125.0	34.4	9.5	.5	4.0
80-08-13	1340	331	L5	.0	124.0	145.0	29.8	16.1	.2	.6
80-08-20	1400	331	15	.0	93.1	120.0	33.9	8.6	.4	4.0
80-08-27	1440	330	20	.0	105.0	137.0	39.2	9.5	.7	5.0
80-09-16	1440	330	20.	.0	97.7	128.0	34.8	10.0	.4	4.7
80-09-26	1240	330	25.	.0	100.8	131.0	36.4	9.7	.6	5.8
80-10-15	1430	331	25.	.0	106.0	139.8	38.6	10.6	.6	6.4
80-10-18	1144	330	20.	.0	107.0	143.0	39.8	10.6	.5	5.6
80-10-24	1220	330	25.	.0	112.0	151.0	41.2	11.7	.6	7.3
80-11-26	1420	331	30.	.0	114.0	160.0	42.6	13.0	.7	7.2
80-11-27	1245	330	40.	.0	116.0	164.0	46.8	11.4	.6	8.6
80-12-03	1231	330	30.	.0	115.0	158.0	47.7	9.4	.8	5.7
81-01-13	1230	331	25.	.0	109.0	153.0	40.9	12.4	.5	6.4
81-02-04	1010	330	35.	.0	116.0	165.0	45.6	12.4	.7	8.2
81-02-12	1201	330	30.	.0	130.0	182.0	47.6	15.3	.7	7.9
81-04-03	1410	330	20	.0	111.0	158.0	42.6	12.5	.6	6.4
81-04-08	1257	330	15.	.5	113.0	156.0	43.7	11.4	.8	5.8
81-04-30	1400	330	20	.0	99.2	121.0	34.9	8.2	.4	3.6
81-08-25	0940	330	5.	.0	95.1	115.0	29.9	9.8	.5	2.9
81-10-27	1030	330	25.	.0	118.0	159.0	41.7	13.3	.6	7.2
81-11-25	1050	330	L5	.0	112.0	159.0	39.3	14.8	.5	4.9

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - **08NG0002** LAT. 49D 25M 17S LONG. 115D 25M 10S
KOOTENAY RIVER AT HWY 3 CROSSING. WARDNER, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-24	0830	330	3.9	.072	3.9	21.0	.004	--	--	--
79-10-15	0815	330	6.8	.210	4.9	46.5	.073	--	--	--
79-11-21	1430	330	9.8	.220	5.8	51.0	.105	--	--	--
80-01-21	1330	330	12.0	.105	6.2	55.0	.159	--	--	--
80-03-21	1400	330	16.9	.240	5.7	61.0	.132	--	--	--
80-04-16	1430	331	8.6	.200	5.0	60.0	L.002	--	--	--
80-04-23	1400	330	6.0	.120	5.9	36.0	.088	--	--	--
80-04-25	1320	330	4.9	.100	5.9	25.0	.168	--	--	--
80-04-30	1400	331	2.0	L.050	5.3	12.9	.202	--	--	--
80-05-13	1430	331	2.5	.080	4.9	15.4	.098	--	--	--
80-05-21	1400	331	2.3	.070	4.3	13.1	.091	--	--	--
80-05-29	1245	330	1.3	.075	4.1	12.5	.088	--	--	--
	1339	331	2.2	.085	4.4	13.7	.084	--	--	--
80-06-04	1323	331	2.0	.072	4.4	13.7	.076	--	--	--
80-06-12	1230	331	2.0	.080	4.3	12.0	.072	--	--	--
80-06-18	1323	331	1.4	.074	4.0	13.4	.060	--	--	--
80-06-25	1400	331	2.1	.080	4.1	15.5	.057	--	--	--
80-06-26	1210	330	2.4	.088	4.2	17.0	.068	--	--	--
80-07-03	1430	331	3.1	.092	4.8	22.5	.058	--	--	--
80-07-09	1430	331	3.4	.116	4.5	24.0	.055	--	--	--
80-07-16	1325	331	3.1	.114	4.4	24.0	.057	--	--	--
80-07-23	1430	331	4.0	.114	4.2	24.5	L.002	--	--	--
80-07-24	1810	330	4.0	.112	4.2	24.5	.051	--	--	--
	1815	330	3.6	.111	4.2	25.0	.050	--	--	--
80-08-03	1230	331	.5	.083	3.9	21.5	.060	--	--	--
80-08-07	1320	331	4.8	.125	4.3	26.0	.045	--	--	--
80-08-09	1037	330	5.5	.122	4.3	26.5	.049	--	--	--
80-08-13	1340	331	.5	.074	3.9	25.0	.053	--	--	--
80-08-20	1400	331	5.0	.120	4.4	22.0	.048	--	--	--
80-08-27	1440	330	6.7	.121	4.5	28.5	.040	--	--	--
80-09-16	1440	330	5.6	.050	4.8	27.0	.065	--	--	--
80-09-26	1240	330	6.4	.110	4.7	32.5	.048	--	--	--
80-10-15	1430	331	7.6	.120	4.8	35.0	.063	--	--	--
80-10-18	1144	330	6.8	.140	4.7	36.5	.057	--	--	--
80-10-24	1220	330	8.7	.130	5.2	41.0	.072	--	--	--
80-11-26	1420	331	8.7	.180	6.0	47.5	.122	--	--	--
80-11-27	1245	330	10.6	.150	5.6	48.0	.118	--	--	--
80-12-03	1231	330	8.1	.140	5.4	45.5	.163	--	--	--
81-01-13	1230	331	7.1	.160	5.7	46.0	.136	--	--	--
81-02-04	1010	330	9.6	.170	5.6	53.0	.126	--	--	--
81-02-12	1201	330	8.7	.190	6.1	47.0	.135	--	--	--
81-04-03	1410	330	6.4	.140	5.8	46.0	.091	--	--	--
81-04-08	1257	330	5.7	.180	5.6	45.5	.103	--	--	--
81-04-30	1400	330	3.9	.040	5.8	23.4	.117	--	--	--
81-08-25	0940	330	2.9	.110	4.7	22.6	.052	.033	24.7	0
81-10-27	1030	330	9.2	L.050	5.2	38.0	.093	.155	--	--
81-11-25	1050	330	5.5	2.300	5.4	40.5	.096	.171	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 008EC08NG0002 LAT. 49D 25M 17S LONG. 115D 25M 10S
KOOTENAY RIVER AT HWY 3 CROSSING. WARDNER, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-07-24	0830	330	--	14.	128.	12	89.	--	--	--
79-10-15	0815	330	--	L10.	211.	L10.	167.	--	--	--
79-11-21	1430	330	--	L10.	241.	L10.	195.	--	--	--
80-01-21	1330	330	--	L10.	241.	L10.	187.	--	--	--
80-03-21	1400	330	--	L10.	252.	L10.	185.	--	--	--
80-04-16	1430	331	--	12.	240.	10.	90.	--	--	--
80-04-23	1400	330	--	20.	200.	17.	1233.	--	--	--
80-04-25	1320	330	--	41.	230.	38.	104.	--	--	--
80-04-30	1400	331	--	415	150.	355	60.	--	--	--
80-05-13	1430	331	--	55.	120	44	100.	--	--	--
80-05-21	1400	331	--	58.	103.	48	86.	--	--	--
80-05-29	1245	330	--	48	177	40	100.	--	--	--
	1339	331	--	76.	116.	70.	90	--	--	--
80-06-04	1323	331	--	62.	120	50.	88.	--	--	--
80-06-12	1230	331	--	120.	58	120	48	--	--	--
80-06-18	1323	331	--	94	150	86	82.	--	--	--
80-06-25	1400	331	--	25	140	18.	96	--	--	--
80-06-26	1210	330	--	36.	150	34	85.	--	--	--
80-07-03	1430	331	--	14.	140	L10.	91.	--	--	--
80-07-09	1430	331	--	L10	160	L10	100.	--	--	--
80-07-16	1325	331	--	L10	150.	L10.	92.	--	--	--
80-07-23	1430	331	--	11.	150.	L10.	130	--	--	--
80-07-24	1810	330	--	11.	160.	L10.	100.	--	--	--
	1815	330	--	11.	160.	L10.	130.	--	--	--
80-08-03	1230	331	--	L10	156.	L10.	120	--	--	--
80-08-07	1320	331	--	L10.	161	L10.	137.	--	--	--
80-08-09	1037	330	--	L10.	156.	L10.	129	--	--	--
80-08-13	1340	331	--	L10.	178.	L10	154.	--	--	--
80-08-20	1400	331	--	L10.	158	L10.	113.	--	--	--
80-08-27	1440	330	--	L10.	173.	L10.	128	--	--	--
80-09-16	1440	330	--	10.	160.	L10.	130	--	--	--
80-09-26	1240	330	--	L10.	174.	L10.	125.	--	--	--
80-10-15	1430	331	--	L10.	180	L10.	150.	--	--	--
80-10-18	1144	330	--	L10.	170.	L10.	130	--	--	--
80-10-24	1220	330	--	L10.	190.	L10.	150.	--	--	--
80-11-26	1420	331	--	L10.	200	L10.	169.	--	--	--
80-11-27	1245	330	--	L10.	216	L10.	174.	--	--	--
80-12-03	1231	330	--	24	225.	20.	165.	--	--	--
81-01-13	1230	331	--	L10.	191.	L10.	153.	--	--	--
81-02-04	1010	330	--	L10.	200.	L10.	141.	--	--	--
81-02-12	1201	330	--	L10.	232.	L10.	194.	--	--	--
81-04-03	1410	330	--	L10.	200.	L10.	150	--	--	--
81-04-08	1257	330	--	L10.	185.	L10.	164.	--	--	--
81-04-30	1400	330	--	18.	159.	13.	113.	--	--	--
81-08-25	0940	330	--	L10.	160.	L10.	120.	L. 05	L. 001	--
81-10-27	1030	330	--	L10.	150.	L10.	140.	L. 05	001	--
81-11-25	1050	330	--	L10.	184.	L10	166.	L. 05	L. 001	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08CC08NG0002
KOOTENAY RIVER AT HWY 3 CROSSING. WARDNER, BRITISH COLUMBIA LAT. 49D 25M 17S LONG. 115D 25M 10S

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE FE MG/L
79-07-24	0830	330	.0005	L.0001	--	--	--	--	--	--
79-10-15	0815	330	.0009	.0001	--	--	--	--	--	--
79-11-21	1430	330	.0009	.0001	--	--	--	--	--	--
80-01-21	1330	330	.0008	.0001	--	--	--	--	--	--
80-03-21	1400	330	.0015	.0001	--	--	--	--	--	--
80-04-16	1430	331	.0011	.0001	--	--	--	--	--	--
80-04-23	1400	330	.0008	L.0001	--	--	--	--	--	--
80-04-25	1320	330	.0017	L.0001	--	--	--	--	--	--
80-04-30	1400	331	.0028	L.0001	--	--	--	--	--	--
80-05-13	1430	331	.0005	L.0001	--	--	--	--	--	--
80-05-21	1400	331	.0006	L.0001	--	--	--	--	--	--
80-05-29	1245	330	.0004	.0001	--	--	--	--	--	--
	1339	331	.0005	L.0001	--	--	--	--	--	--
80-06-04	1323	331	.0005	.0004	--	--	--	--	--	--
80-06-12	1230	331	.0008	L.0001	--	--	--	--	--	--
80-06-18	1323	331	.0016	L.0001	--	--	--	--	--	--
80-06-25	1400	331	.0005	.0001	--	--	--	--	--	--
80-06-26	1210	330	.0004	.0001	--	--	--	--	--	--
80-07-03	1430	331	.0004	.0001	--	--	--	--	--	--
80-07-09	1430	331	.0004	.0001	--	--	--	--	--	--
80-07-16	1325	331	.0004	L.0001	--	--	--	--	--	--
80-07-23	1430	331	.0003	.0001	--	--	--	--	--	--
80-07-24	1810	330	.0003	.0001	--	--	--	--	--	--
	1815	330	.0003	.0001	--	--	--	--	--	--
80-08-03	1230	331	.0003	.0003	--	--	--	--	--	--
80-08-07	1320	331	.0005	.0002	--	--	--	--	--	--
80-08-09	1037	330	.0007	.0001	--	--	--	--	--	--
80-08-13	1340	331	.0002	.0001	--	--	--	--	--	--
80-08-20	1400	331	.0004	.0002	--	--	--	--	--	--
80-08-27	1440	330	.0005	L.0001	--	--	--	--	--	--
80-09-16	1440	330	.0005	.0001	--	--	--	--	--	--
80-09-26	1240	330	.0007	.0002	--	--	--	--	--	--
80-10-15	1430	331	.0007	.0001	--	--	--	--	--	--
80-10-18	1144	330	.0007	.0001	--	--	--	--	--	--
80-10-24	1220	330	.0007	L.0001	--	--	--	--	--	--
80-11-26	1420	331	.0008	.0001	--	--	--	--	--	--
80-11-27	1245	330	.0008	L.0001	--	--	--	--	--	--
80-12-03	1231	330	.0012	.0001	--	--	--	--	--	--
81-01-13	1230	331	.0015	.0001	--	--	--	--	--	--
81-02-04	1010	330	.0011	.0001	--	--	--	--	--	--
81-02-12	1201	330	.0021	.0001	--	--	--	--	--	--
81-04-03	1410	330	.0010	L.0001	--	--	--	--	--	--
81-04-08	1257	330	.0015	L.0001	--	--	--	--	--	--
81-04-30	1400	330	.0006	L.0001	--	--	--	--	--	--
81-08-25	0940	330	.0003	.0001	--	.020	--	.004	.10	--
81-10-27	1030	330	.0005	.0001	--	.020	--	.002	.22	--
81-11-25	1050	330	.0004	.0001	--	.010	--	.005	.09	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NG0002 LAT 49D 25M 17S LONG. 115D 25M 10S
KOOTENAY RIVER AT HWY 3 CROSSING. WARDNER, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-07-24	0830	330	--	--	226.70	--	--	--
79-10-15	0815	330	--	--	56.42	--	--	--
79-11-21	1430	330	--	--	34.45	--	--	--
80-01-08	1200	330	--	--	--	--	--	24.15
80-01-21	1330	330	--	--	31.85	--	--	--
80-03-21	1400	330	--	--	34.98	--	--	--
80-04-16	1430	331	--	--	67.50	--	--	--
80-04-23	1400	330	--	--	191.10	--	--	--
80-04-25	1320	330	--	--	356.00	--	--	--
80-04-30	1400	331	--	--	918.00	--	--	--
80-05-07	1200	330	--	--	--	--	959.00	--
80-05-13	1430	331	--	--	624.30	--	--	--
80-05-21	1400	331	--	--	756.00	--	--	--
80-05-29	1245	330	--	--	656.20	--	--	--
	1339	331	--	--	665.00	--	--	--
80-06-04	1323	331	--	--	665.00	--	--	--
80-06-12	1230	331	--	--	791.10	--	--	--
80-06-18	1323	331	--	--	758.80	--	--	--
80-06-25	1400	331	--	--	498.30	--	--	--
80-06-26	1210	330	--	--	459.70	--	--	--
80-07-03	1430	331	--	--	342.20	--	--	--
80-07-09	1430	331	--	--	283.40	--	--	--
80-07-16	1325	331	--	--	281.00	--	--	--
80-07-23	1430	331	--	--	232.90	--	--	--
80-07-24	1810	330	--	--	249.80	--	--	--
	1815	330	--	--	249.80	--	--	--
80-08-03	1230	331	--	--	179.90	--	--	--
80-08-07	1320	331	--	--	168.70	--	--	--
80-08-09	1037	330	--	--	163.10	--	--	--
80-08-13	1340	331	--	--	174.20	--	--	--
80-08-20	1400	331	--	--	172.10	--	--	--
80-08-27	1440	330	--	--	120.00	--	--	--
80-09-16	1440	330	--	--	119.30	--	--	--
80-09-26	1240	330	--	--	111.20	--	--	--
80-10-15	1430	331	--	--	95.30	--	--	--
80-10-18	1144	330	--	--	87.59	--	--	--
80-10-24	1220	330	--	--	82.62	--	--	--
80-11-26	1420	331	--	--	52.75	--	--	--
80-11-27	1245	330	--	--	58.94	--	--	--
80-12-03	1231	330	--	--	46.90	--	--	--
80-12-31	1200	330	--	--	--	205.26	--	--
81-01-13	1230	331	--	--	67.20	--	--	--
81-02-04	1010	330	--	--	51.65	--	--	--
81-02-11	1200	330	--	--	--	--	--	38.83
81-02-12	1201	330	--	--	43.51	--	--	--
81-04-03	1410	330	--	--	75.20	--	--	--
81-04-08	1257	330	--	--	67.30	--	--	--
81-04-30	1400	330	--	--	220.30	--	--	--
81-05-27	1200	330	--	--	--	--	1322.00	--
81-08-25	0940	330	L 0005	.001	200.60	--	--	--
81-10-27	1030	330	L.0005	001	88.30	--	--	--
81-11-25	1050	330	L 0005	L.001	66.98	--	--	--
81-12-31	1200	330	--	--	--	243.96	--	--

FOOTNOTE L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NH0005 LAT. 49D 7M 0S LONG 116D 34M 45S
KOOTENAY RIVER AT NICKS ISLAND. HIGHWAY 3 ROAD BRIDGE. 5KM WNW OF CRESTON. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-09-12	1410	330	--	16.1	21.4	--	8.1	--	215	82
79-10-02	1440	330	--	15.9	21.1	--	8.1	--	217	90
79-12-20	1600	330	6.5	5.0	18.4	--	8.2	--	234	2.20
80-01-03	1450	330	.5	3.4	20.3	--	8.1	--	219	1.60
80-02-01	1350	330	--	.0	20.2	--	8.2	--	255	6.50
80-04-10	1100	330	3.5	5.0	21.8	--	8.1	--	189	1.90
80-04-14	1000	330	12.0	8.0	18.3	8.4	8.1	200	195	3.30
80-06-04	2015	330	12.3	10.0	20.5	--	7.7	--	100	2.70
80-07-04	1510	330	--	16.7	21.7	--	7.9	--	177	90
80-08-06	1019	330	20.0	16.0	24.5	7.3	8.2	195	208	38
80-08-15	1404	330	23.0	16.0	19.4	--	7.8	--	212	19
80-09-25	0700	330	2.0	13.0	18.4	8.2	8.0	160	201	69
80-10-03	1600	330	20.5	14.0	22.4	--	8.1	--	205	86
80-10-20	1014	330	13.0	12.0	21.3	8.8	8.2	260	234	68
80-11-05	1439	330	10.5	8.8	21.0	--	8.1	--	227	51
80-11-25	1410	330	1.5	3.8	22.7	--	8.0	--	225	40
80-12-23	1350	330	3.0	4.5	21.5	--	8.0	--	230	40
81-02-13	1008	330	5.0	2.5	16.4	8.4	8.1	240	243	32
	1650	330	2.0	1.5	21.5	--	8.0	--	243	30
81-02-27	1640	330	-2.0	--	20.4	--	7.9	--	212	2.80
81-04-06	1707	330	8.0	8.0	18.7	8.5	8.0	160	164	98
81-05-08	1545	330	--	--	22.4	--	7.6	--	88	5.00
81-06-25	1520	330	27.0	12.5	18.9	--	7.6	--	130	2.80
81-07-13	1532	330	--	14.0	15.5	--	8.0	--	192	1.80
81-08-19	1300	330	24.5	19.5	19.6	7.9	8.3	220	211	50
81-08-20	1515	330	24.5	18.0	19.1	--	8.2	--	207	40
81-09-15	1541	330	23.0	16.0	22.2	--	7.9	--	211	40
81-10-05	1716	330	8.0	10.0	19.7	--	7.9	--	199	30

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-09-12	1410	330	L5.	0	92.2	109.0	30.2	8.2	.5	2.5
79-10-02	1440	330	5.	0	95.5	113.0	32.3	7.9	.5	2.4
79-12-20	1600	330	5.	.0	101.0	117.0	33.0	8.4	.5	2.9
80-01-03	1450	330	5.	.0	93.1	109.0	30.3	8.1	.5	3.0
80-02-01	1350	330	10.	.0	108.0	127.0	35.8	9.1	.5	3.4
80-04-10	1100	330	L5.	0	92.7	108.0	30.9	7.5	.6	3.3
80-04-14	1000	330	5.	0	83.5	96.7	28.0	6.5	.8	3.1
80-06-04	2015	330	25.	0	42.3	47.8	15.5	2.2	.5	1.8
80-07-04	1510	330	15	0	73.6	84.5	25.2	5.3	.4	2.3
80-08-06	1019	330	10	0	86.9	100.0	29.1	6.6	.5	2.1
80-08-15	1404	330	10	0	89.8	105.0	28.8	8.0	.6	2.4
80-09-25	0700	330	10.	.0	88.2	100.0	29.0	6.7	.5	2.2
80-10-03	1600	330	5.	.0	89.6	103.0	29.3	7.2	.4	2.2
80-10-20	1014	330	10.	.0	94.6	111.0	31.9	7.6	.7	2.3
80-11-05	1439	330	10.	.0	93.3	110.0	31.4	7.7	.4	2.5
80-11-25	1410	330	10.	.0	91.3	111.0	31.3	8.0	.5	2.5
80-12-23	1350	330	10.	.0	96.1	114.0	31.3	8.7	.4	2.9
81-02-13	1008	330	10.	.0	101.0	122.0	32.5	9.9	.5	2.9
	1650	330	10.	.0	99.1	122.0	33.4	9.4	.5	3.0
81-02-27	1640	330	15.	0	86.3	104.0	28.8	7.8	.5	2.8
81-04-06	1707	330	15.	.0	69.3	76.1	22.5	4.8	.8	2.7
81-05-08	1545	330	20.	.0	35.7	39.4	11.2	2.8	.4	1.6
81-06-25	1520	330	L5.	.0	54.3	61.3	17.6	4.2	.3	1.8
81-07-13	1532	330	10.	.0	80.7	92.9	25.8	6.9	.3	1.9
81-08-19	1300	330	10.	.0	91.0	103.0	28.3	7.9	.5	2.1
81-08-20	1515	330	10.	.0	91.0	103.0	26.7	8.8	.5	2.2
81-09-15	1541	330	10.	.0	89.0	104.0	28.3	8.1	.6	2.1
81-10-05	1716	330	10.	0	84.8	99.3	25.9	8.4	.4	2.0

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08ECDBNH0005 LAT. 49D 7M 0S LONG. 116D 34M 45S
KOOTENAY RIVER AT NICKS ISLAND HIGHWAY 3 ROAD BRIDGE, 5KM WNW OF CRESTON, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-09-12	1410	330	2.3	.082	4.1	15.6	L.002	--	--	--
79-10-02	1440	330	2.7	.120	3.4	17.1	L.002	--	--	--
79-12-20	1600	330	2.9	.120	5.1	20.4	.099	--	--	--
80-01-03	1450	330	2.8	.110	5.8	18.2	.092	--	--	--
80-02-01	1350	330	3.5	.132	4.5	21.0	.090	--	--	--
80-04-10	1100	330	1.3	.120	6.1	16.5	.049	--	--	--
80-04-14	1000	330	1.9	.110	6.4	14.5	.020	--	--	--
80-06-04	2015	330	1.2	.052	7.1	6.5	.002	--	--	--
80-07-04	1510	330	1.9	.085	5.6	11.8	.002	--	--	--
80-08-06	1019	330	2.1	.092	4.3	13.5	.016	--	--	--
80-08-15	1404	330	2.6	.094	4.1	13.5	.007	--	--	--
80-09-25	0700	330	2.0	.080	5.1	15.1	.012	--	--	--
80-10-03	1600	330	1.9	.070	4.6	15.4	.010	--	--	--
80-10-20	1014	330	1.9	.090	4.1	15.8	.116	--	--	--
80-11-05	1439	330	2.5	.100	4.8	17.0	.074	--	--	--
80-11-25	1410	330	2.6	.120	5.0	17.0	.095	--	--	--
80-12-23	1350	330	3.1	.110	4.9	17.7	.089	--	--	--
81-02-13	1008	330	2.9	.110	4.8	18.0	.116	--	--	--
	1650	330	3.0	.100	5.9	19.4	.103	--	--	--
81-02-27	1640	330	2.4	.090	6.6	14.8	.204	--	--	--
81-04-06	1707	330	1.7	.080	8.2	9.7	.059	--	--	--
81-05-08	1545	330	.7	.070	8.4	4.9	.034	--	--	--
81-06-25	1520	330	1.0	.060	7.8	7.7	L.002	--	--	--
81-07-13	1532	330	1.5	.080	6.0	11.2	.013	--	--	--
81-08-19	1300	330	2.1	.080	5.1	12.6	.032	.138	24.1	L.3
81-08-20	1515	330	1.5	.070	5.2	12.3	.018	100	23.3	1.9
81-09-15	1541	330	1.6	.090	5.0	12.5	.055	187	24.0	L.9
81-10-05	1716	330	1.4	.080	5.1	12.4	.296	490	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-09-12	1410	330	--	L10.	134.	L10.	100.	--	--	--
79-10-02	1440	330	--	L10.	145.	L10.	125.	--	--	--
79-12-20	1600	330	--	L10.	142.	L10.	111.	--	--	--
80-01-03	1450	330	--	L10.	133.	L10.	98.	--	--	--
80-02-01	1350	330	--	20.	156.	19.	126.	--	--	--
80-04-10	1100	330	--	L10.	135.	L10.	87.	--	--	--
80-04-14	1000	330	--	L10.	128.	L10.	89.	--	--	--
80-06-04	2015	330	--	L10.	64.	L10.	33.	--	--	--
80-07-04	1510	330	--	L10.	120.	L10.	91.	--	--	--
80-08-06	1019	330	--	L10.	129.	L10.	113.	--	--	--
80-08-15	1404	330	--	L10.	128.	L10.	96.	--	--	--
80-09-25	0700	330	--	L10.	135.	L10.	95.	--	--	--
80-10-03	1600	330	--	L10.	120.	L10.	94.	--	--	--
80-10-20	1014	330	--	L10.	120.	L10.	100.	--	--	--
80-11-05	1439	330	--	L10.	180.	L10.	110.	--	--	--
80-11-25	1410	330	--	L10.	119.	L10.	106.	--	--	--
80-12-23	1350	330	--	L10.	134.	L10.	117.	--	--	--
81-02-13	1008	330	--	L10.	141.	L10.	128.	--	--	--
	1650	330	--	L10.	136.	L10.	117.	--	--	--
81-02-27	1640	330	--	22.	160.	19.	81.	--	--	--
81-04-06	1707	330	--	L10.	103.	L10.	81.	--	--	--
81-05-08	1545	330	--	18.	67.	16.	58.	--	--	--
81-06-25	1520	330	--	L10.	79.	L10.	56.	--	--	--
81-07-13	1532	330	--	10.	119.	L10.	98.	--	--	--
81-08-19	1300	330	--	L10.	140.	L10.	110.	L.05	L.001	--
81-08-20	1515	330	--	L10.	180.	L10.	83.	L.05	L.001	--
81-09-15	1541	330	--	L10.	110.	L10.	100.	L.05	L.001	--
81-10-05	1716	330	--	L10.	130.	L10.	120.	L.05	L.001	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08NB008 LAT. 49D 7M 0S LONG 116D 34M 45S
KOOTENAY RIVER AT WICKS ISLAND. HIGHWAY 3 ROAD BRIDGE. 5KM NNW OF CRESTON BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE FE MG/L
79-09-12	1410	330	.0010	.0001	--	--	--	--	--	--
79-10-02	1440	330	.0006	.0002	--	--	--	--	--	--
79-12-20	1600	330	.0006	.0001	--	--	--	--	--	--
80-01-03	1450	330	.0006	.0001	--	--	--	--	--	--
80-02-01	1350	330	.0005	.0002	--	--	--	--	--	--
80-04-10	1100	330	.0007	L.0001	--	--	--	--	--	--
80-04-14	1000	330	.0005	L.0001	--	--	--	--	--	--
80-06-04	2015	330	.0003	L.0001	--	--	--	--	--	--
80-07-04	1510	330	.0004	.0001	--	--	--	--	--	--
80-08-06	1019	330	.0004	.0001	--	--	--	--	--	--
80-08-15	1404	330	.0005	.0001	--	--	--	--	--	--
80-09-25	0700	330	.0003	.0001	--	--	--	--	--	--
80-10-03	1800	330	.0003	.0001	--	--	--	--	--	--
80-10-20	1014	330	.0004	.0001	--	--	--	--	--	--
80-11-05	1439	330	.0003	.0002	--	--	--	--	--	--
80-11-25	1410	330	.0003	.0002	--	--	--	--	--	--
80-12-23	1350	330	.0005	.0001	--	--	--	--	--	--
81-02-13	1008	330	.0004	.0001	--	--	--	--	--	--
	1650	330	.0004	.0001	--	--	--	--	--	--
81-02-27	1640	330	.0006	L.0001	--	--	--	--	--	--
81-04-06	1707	330	.0005	L.0001	--	--	--	--	--	--
81-05-08	1545	330	.0003	L.0001	--	--	--	--	--	--
81-06-25	1520	330	.0005	L.0001	--	--	--	--	--	--
81-07-13	1532	330	.0005	.0001	--	--	--	--	--	--
81-08-19	1300	330	.0005	.0002	--	.020	--	.002	.06	--
81-08-20	1515	330	.0006	.0002	--	.020	--	.002	.06	--
81-09-15	1541	330	.0006	.0001	--	.020	--	.005	.07	--
81-10-05	1716	330	.0004	.0001	--	L.010	--	.003	.06	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-09-12	1410	330	--	--	240.93	--	--	--
79-10-02	1440	330	--	--	253.73	--	--	--
79-12-20	1600	330	--	--	627.30	--	--	--
80-01-03	1450	330	--	--	169.63	--	--	--
80-02-01	1350	330	--	--	526.27	--	--	--
80-03-26	1200	330	--	--	--	--	--	137.71
80-04-10	1100	330	--	--	157.10	--	--	--
80-04-14	1000	330	--	--	189.50	--	--	--
80-04-29	1200	330	--	--	--	--	1287.00	--
80-06-04	2015	330	--	--	397.20	--	--	--
80-07-04	1510	330	--	--	215.10	--	--	--
80-08-06	1019	330	--	--	281.47	--	--	--
80-08-15	1404	330	--	--	252.27	--	--	--
80-09-25	0700	330	--	--	214.41	--	--	--
80-10-03	1800	330	--	--	400.80	--	--	--
80-10-20	1014	330	--	--	551.43	--	--	--
80-11-05	1439	330	--	--	595.83	--	--	--
80-11-25	1410	330	--	--	559.41	--	--	--
80-12-23	1350	330	--	--	368.77	--	--	--
80-12-31	1200	330	--	--	--	408.23	--	--
81-02-13	1008	330	--	--	812.77	--	--	--
	1650	330	--	--	612.77	--	--	--
81-02-27	1640	330	--	--	546.20	--	--	--
81-04-06	1707	330	--	--	207.20	--	--	--
81-05-08	1545	330	--	--	448.80	--	--	--
81-06-25	1520	330	--	--	1020.40	--	--	--
81-07-08	1200	330	--	--	--	--	1328.20	--
81-07-13	1532	330	--	--	986.30	--	--	--
81-08-19	1300	330	L.0005	.003	476.71	--	--	--
81-08-20	1515	330	L.0005	L.001	--	--	--	--
81-09-15	1541	330	L.0005	L.001	323.48	--	--	--
81-09-21	1200	330	--	--	--	--	--	183.00
81-10-06	1716	330	.0011	L.001	181.58	--	--	--
81-12-31	1200	330	--	--	--	549.30	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08NH0010 LAT. 49D 0M 18S LONG. 116D 10M 46S
MOYIE RIVER AT HWY 95 BRIDGE. 0.5 KM NORTH OF U.S. BORDER. KINGSGATE. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02051S TEMP. WATER DEG. C.	02051L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-07-17	0850	330	--	15.5	20.7	--	7.5	--	44	.72
79-10-01	0910	330	--	7.7	20.6	--	7.5	--	52	3.60
79-11-06	1200	330	2.0	2.0	20.3	--	7.2	--	47	.55
80-02-08	1330	330	--	.0	20.2	--	7.5	--	52	.58
80-04-14	0945	330	17.5	9.5	18.7	8.1	7.3	L50	45	3.00
80-05-19	1221	330	19.0	9.5	21.0	--	7.2	--	31	1.20
80-08-06	1124	330	23.0	14.0	24.5	8.0	7.4	250	48	.22
80-08-08	1315	330	20.0	17.0	24.6	--	7.6	--	47	.33
80-09-10	1015	330	19.0	12.0	21.6	--	7.3	--	51	.44
80-10-02	1210	330	17.0	10.0	22.3	--	8.1	--	49	.83
80-10-20	0919	330	8.0	7.0	21.3	8.2	7.5	60	53	.86
80-11-03	1350	330	10.0	5.5	21.0	--	7.3	--	43	.86
81-01-16	1220	330	--	--	19.3	--	6.9	--	47	1.00
81-02-10	1420	330	-10.0	--	20.3	--	7.1	--	50	.33
81-02-13	0915	330	--	1.5	19.9	8.3	7.2	L50	46	.38
81-04-10	1345	330	3.0	4.0	18.3	--	7.4	--	45	.44
	1424	330	8.0	6.0	18.6	8.8	7.4	70	47	.34
81-05-12	1145	330	11.0	6.0	22.8	--	7.2	--	35	1.60
81-08-19	1430	330	28.0	20.5	19.8	7.5	7.6	50	47	.40
81-09-25	1340	330	7.5	9.0	21.8	--	7.2	--	50	.40
81-11-03	1400	330	10.0	5.0	21.6	--	7.3	--	47	.43

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10503L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-17	0850	330	L5.	0	18.0	18.1	4.5	1.7	.5	1.7
79-10-01	0910	330	L5.	.0	21.7	24.1	5.9	2.3	.7	2.2
79-11-06	1200	330	L5.	.0	20.5	21.5	5.2	2.1	.6	2.2
80-02-08	1330	330	L5.	.0	20.2	19.7	5.8	1.3	.5	2.1
80-04-14	0945	330	10.	.0	17.0	17.8	5.0	1.3	.8	2.2
80-05-19	1221	330	25.	.0	10.5	12.6	4.4	.4	.4	1.1
80-08-06	1124	330	10.	.0	16.0	17.0	4.8	1.2	.8	1.8
80-08-08	1315	330	10.	.0	17.0	18.0	4.8	1.5	.8	1.8
80-09-10	1015	330	10.	.0	18.4	19.2	4.8	1.8	.8	1.8
80-10-02	1210	330	10.	.0	18.6	16.4	3.8	1.7	.7	1.9
80-10-20	0919	330	10.	.0	19.1	17.8	5.3	1.1	.9	1.8
80-11-03	1350	330	20.	.0	16.0	15.6	4.1	1.3	.5	1.7
81-01-16	1220	330	25.	.0	18.0	20.2	5.1	1.8	.7	1.8
81-02-10	1420	330	10.	.0	20.0	25.4	6.1	2.5	.6	2.0
81-02-13	0915	330	10.	.0	17.8	21.6	5.0	2.2	.6	1.7
81-04-10	1345	330	15.	.0	16.4	17.2	4.9	1.2	.5	1.8
	1424	330	15.	0	18.4	20.5	4.7	2.1	.8	1.9
81-05-12	1145	330	25.	.0	12.3	13.9	3.9	1.0	.6	1.3
81-08-19	1430	330	15.	0	18.6	23.8	3.1	3.9	.5	1.7
81-09-25	1340	330	10.	.0	18.6	19.9	3.1	2.9	.5	2.0
81-11-03	1400	330	10.	.0	18.3	23.8	5.5	2.4	.5	1.8

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-17	0850	330	.8	.068	8.8	2.7	.013	--	--	--
79-10-01	0910	330	1.1	.071	11.6	3.1	.038	--	--	--
79-11-06	1200	330	9	.059	11.2	8.0	.038	--	--	--
80-02-08	1330	330	1.1	L.050	10.6	3.7	.073	--	--	--
80-04-14	0945	330	1.1	.050	17.0	4.5	.064	--	--	--
80-05-19	1221	330	.2	L.050	7.8	2.3	.011	--	--	--
80-08-06	1124	330	1.0	L.050	9.6	2.6	.019	--	--	--
80-08-08	1315	330	.6	L.050	9.7	2.8	.016	--	--	--
80-09-10	1015	330	.7	.046	10.1	2.8	.015	--	--	--
80-10-02	1210	330	1.1	.020	10.4	2.6	.008	--	--	--
80-10-20	0919	330	1.1	.040	10.4	2.7	.090	--	--	--
80-11-03	1350	330	.9	.050	10.4	3.1	.009	--	--	--
81-01-16	1220	330	1.0	L.050	9.7	3.0	.040	--	--	--
81-02-10	1420	330	.8	.050	10.6	3.2	.042	--	--	--
81-02-13	0915	330	.8	.050	9.7	3.1	.051	--	--	--
81-04-10	1345	330	.8	L.050	10.2	2.7	.025	--	--	--
	1424	330	1.1	L.050	10.2	3.0	.071	--	--	--
81-05-12	1145	330	.4	.040	9.3	2.8	.011	--	--	--
81-08-19	1430	330	.7	.030	9.6	2.3	.010	--	--	--
81-09-25	1340	330	.8	.043	10.7	2.3	.035	.077	--	--
81-11-03	1400	330	.7	.480	10.0	2.6	.056	.122	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NH0010 LAT 49D 0M 16S LONG 115D 10M 46S
MOYIE RIVER AT HWY 95 BRIDGE 0.5 KM NORTH OF U.S BORDER KINGSGATE BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE CU MG/L	29306P COPPER EXTRBLE CU MG/L
79-07-17	0850	330	--	L10.	42	L10.	34	--	--	--
79-10-01	0910	330	--	L10.	45.	L10.	33	--	--	--
79-11-06	1200	330	--	L10.	38.	L10.	35.	--	--	--
80-02-08	1330	330	--	L10.	44.	L10	39	--	--	--
80-04-14	0945	330	--	L10.	45.	L10.	18	--	--	--
80-05-19	1221	330	--	L10.	35.	L10.	18	--	--	--
80-08-06	1124	330	--	L10.	42.	L10.	29	--	--	--
80-08-08	1315	330	--	L10.	35	L10	31	--	--	--
80-09-10	1015	330	--	L10	50	L10	35	--	--	--
80-10-02	1210	330	--	L10.	36	L10.	22	--	--	--
80-10-20	0919	330	--	L10.	35	L10.	28	--	--	--
80-11-03	1350	330	--	L10	48	L10.	27	--	--	--
81-01-16	1220	330	--	76.	35	72	30	--	--	--
81-02-10	1420	330	--	L10.	47	L10	33	--	--	--
81-02-13	0815	330	--	L10	37	L10	29	--	--	--
81-04-10	1345	330	--	L10	27	L10	15	--	--	--
	1424	330	--	L10.	38	L10	33	--	--	--
81-05-12	1145	330	--	15.	41	10.	27	--	--	--
81-08-19	1430	330	--	L10.	51	L10	28	L .05	L .001	--
81-09-25	1340	330	--	L10.	38	L10	27	L .05	L .001	--
81-11-03	1400	330	--	L10	44	L10	26	L .05	L .001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE FE MG/L	26305P IRON EXTRBLE FE MG/L
79-07-17	0850	330	L .0001	L .0001	--	--	--	--	--	--
79-10-01	0910	330	L .0001	L .0001	--	--	--	--	--	--
79-11-06	1200	330	.0004	L .0001	--	--	--	--	--	--
80-02-08	1330	330	.0001	L .0001	--	--	--	--	--	--
80-04-14	0945	330	.0001	L .0001	--	--	--	--	--	--
80-05-19	1221	330	.0001	.0001	--	--	--	--	--	--
80-08-06	1124	330	L .0001	L .0001	--	--	--	--	--	--
80-08-08	1315	330	.0001	L .0001	--	--	--	--	--	--
80-09-10	1015	330	.0001	.0001	--	--	--	--	--	--
80-10-02	1210	330	.0001	L .0001	--	--	--	--	--	--
80-10-20	0919	330	L .0001	L .0001	--	--	--	--	--	--
80-11-03	1350	330	L .0001	L .0001	--	--	--	--	--	--
81-01-16	1220	330	.0005	L .0001	--	--	--	--	--	--
81-02-10	1420	330	L .0001	L .0001	--	--	--	--	--	--
81-02-13	0815	330	L .0001	L .0001	--	--	--	--	--	--
81-04-10	1345	330	.0001	L .0001	--	--	--	--	--	--
	1424	330	L .0001	L .0001	--	--	--	--	--	--
81-05-12	1145	330	L .0001	L .0001	--	--	--	--	--	--
81-08-19	1430	330	.0002	L .0001	--	--	--	.004	.05	--
81-09-25	1340	330	.0001	L .0001	--	L .010	--	.002	.07	--
81-11-03	1400	330	L .0001	L .0001	--	L .010	--	.250	--	.047

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NH0010 LAT. 49D 0M 16S LONG. 116D 10M 48S
MOYIE RIVER AT HWY 95 BRIDGE. 0.5 KM NORTH OF U.S.BORDER. KINGSGATE. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-07-17	0850	330	--	--	4.33	--	--	--
79-10-01	0910	330	--	--	.99	--	--	--
79-11-06	1200	330	--	--	1.39	--	--	--
80-01-29	1200	330	--	--	--	--	--	1.61
80-02-08	1330	330	--	--	2.27	--	--	--
80-04-14	0945	330	--	--	10.30	--	--	--
80-04-29	1200	330	--	--	--	--	163.00	--
80-05-19	1221	330	--	--	65.70	--	--	--
80-08-06	1124	330	--	--	3.51	--	--	--
80-08-08	1315	330	--	--	3.26	--	--	--
80-09-10	1015	330	--	--	3.06	--	--	--
80-10-02	1210	330	--	--	2.72	--	--	--
80-10-20	0919	330	--	--	2.18	--	--	--
80-11-03	1350	330	--	--	3.68	--	--	--
80-12-31	1200	330	--	--	--	16.20	--	--
81-01-18	1220	330	--	--	9.91	--	--	--
81-02-10	1420	330	--	--	3.11	--	--	--
81-02-13	0915	330	--	--	3.82	--	--	--
81-04-10	1345	330	--	--	14.00	--	--	--
	1424	330	--	--	14.00	--	--	--
81-05-12	1145	330	--	--	72.50	--	--	--
81-05-25	1200	330	--	--	--	--	144.00	--
81-08-19	1430	330	L.0005	.002	6.34	--	--	--
81-09-25	1340	330	L.0005	L.001	3.03	--	--	--
81-11-03	1400	330	L.0005	.001	3.94	--	--	--
81-12-31	1200	330	--	--	--	24.30	--	2.32

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NK0002 LAT. 49D 12M 55S LONG. 115D 6M 33S
ELK RIVER AT OLD HWY BRIDGE, BM 2552 3.3 KM SSW OF CONFLUENCE WITH WIGHAM RIVER, BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-08-03	1240	330	--	15.0	21.5	--	8.4	--	292.	5.40
79-09-27	0915	330	--	10.2	19.8	--	8.2	--	312.	.35
79-11-06	1055	330	--	1.0	20.5	--	8.3	--	322.	.76
80-01-04	1020	330	3.0	.5	20.2	--	8.4	--	332.	1.20
80-02-27	1315	330	6.0	.0	19.7	--	8.3	--	338.	64.00
80-05-05	1310	330	23.0	7.0	22.2	--	8.1	--	201.	37.00
80-06-03	1110	330	8.0	5.5	19.9	--	8.0	--	228.	16.00
80-07-08	1150	330	28.5	14.0	21.4	--	8.4	--	274.	1.80
80-11-05	1440	330	10.5	6.5	22.2	--	8.2	--	316.	3.00
81-01-09	1045	330	1.5	1.0	20.4	--	8.1	--	290.	.35
81-04-03	1610	330	4.5	4.0	18.7	--	8.4	--	313.	1.00
81-05-01	1130	330	17.5	7.5	17.3	--	7.9	--	217.	105.00
81-05-29	1310	330	18.5	8.0	22.1	--	8.2	--	225.	111.00
81-08-14	1055	330	23.0	15.0	21.4	--	8.5	--	278.	1.00
81-10-14	1330	330	11.0	5.0	18.8	--	8.3	--	320.	.60
81-12-31	1215	330	-11.0	.0	22.2	--	8.0	--	378.	.35

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-08-03	1240	330	L5	.3	132.0	154.0	43.2	11.2	4	1.3
79-09-27	0915	330	L5.	.0	139.0	173.0	45.7	14.3	5	2.1
79-11-06	1055	330	L5.	.0	143.0	176.0	48.4	13.4	.2	2.3
80-01-04	1020	330	L5	2.1	148.0	174.0	49.0	12.5	4	2.7
80-02-27	1315	330	5.	.0	150.0	181.0	51.6	12.7	.6	2.9
80-05-05	1310	330	60.	.0	99.7	108.0	34.1	5.5	.4	1.0
80-06-03	1110	330	30	.0	107.0	116.0	35.0	6.9	4	1.2
80-07-08	1150	330	5.	.7	129.0	147.0	43.0	9.6	3	1.5
80-11-05	1440	330	10.	.0	137.0	161.0	48.3	11.0	.5	2.1
81-01-09	1045	330	5.	.0	134.0	154.0	43.2	11.2	4	2.1
81-04-03	1610	330	10.	1.7	138.0	160.0	45.9	11.0	5	2.4
81-05-01	1130	330	20.	.0	97.3	107.0	31.4	6.9	.6	1.2
81-05-29	1310	330	10.	.0	117.0	110.0	32.9	5.8	.5	.8
81-08-14	1055	330	10.	2.1	137.0	151.9	43.6	10.5	.5	1.5
81-10-14	1330	330	10	.0	143.0	173.0	47.2	13.4	.3	2.0
81-12-31	1215	330	L5.	.0	162.0	195.0	57.1	12.7	.6	3.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-08-03	1240	330	1.3	.155	5.5	21.0	L.002	--	--	--
79-09-27	0915	330	1.8	.190	3.7	27.0	.012	--	--	--
79-11-06	1055	330	1.9	.151	4.2	32.0	.062	--	--	--
80-01-04	1020	330	2.6	.158	4.7	30.0	.158	--	--	--
80-02-27	1315	330	3.0	.170	4.8	34.0	L.002	--	--	--
80-05-05	1310	330	1.0	.110	4.3	10.4	.146	--	--	--
80-06-03	1110	330	1.2	.125	4.3	11.5	.122	--	--	--
80-07-08	1150	330	1.2	.162	4.1	16.8	.045	--	--	--
80-11-05	1440	330	1.8	.160	4.9	26.5	.095	--	--	--
81-01-09	1045	330	1.7	.130	5.0	20.0	.166	--	--	--
81-04-03	1610	330	2.1	.200	4.3	21.5	.039	--	--	--
81-05-01	1130	330	1.1	.100	4.6	9.5	.172	--	--	--
81-05-29	1310	330	.8	.110	4.3	8.0	.120	--	--	--
81-08-14	1055	330	1.1	.160	4.0	16.6	.109	--	--	--
81-10-14	1330	330	1.6	.150	3.5	24.5	.106	.175	--	--
81-12-31	1215	330	2.4	.180	5.6	31.5	.272	.478	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NK0002 LAT. 49D 12M 55S LONG. 115D 8M 33S
ELK RIVER AT OLD HWY BRIDGE, BM 2552. 3.3 KM SSW OF CONFLUENCE WITH WIGWAM RIVER, BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
78-08-03	1240	330	--	L10.	181.	L10.	151.	--	--	--
79-09-27	0915	330	--	L10.	192.	L10.	162.	--	--	--
79-11-06	1055	330	--	L10.	181.	L10.	161.	--	--	--
80-01-04	1020	330	--	L10.	209.	L10.	169.	--	--	--
80-02-27	1315	330	--	76.	205.	70.	164.	--	--	--
80-05-05	1310	330	--	96.	117.	84.	85.	--	--	--
80-06-03	1110	330	--	33.	190.	32.	82.	--	--	--
80-07-08	1150	330	--	L10.	170.	L10.	130.	--	--	--
80-11-05	1440	330	--	16.	180.	11.	150.	--	--	--
81-01-09	1045	330	--	L10.	160.	L10.	144.	--	--	--
81-04-03	1610	330	--	L10.	185.	L10.	140.	--	--	--
81-05-01	1130	330	--	322.	118.	292.	99.	--	--	--
81-05-29	1310	330	--	311.	120.	275.	90.	--	--	--
81-08-14	1055	330	--	L10.	190.	L10.	130.	--	--	--
81-10-14	1330	330	--	L10.	170.	L10.	150.	L .05	L .001	--
81-12-31	1215	330	--	L10.	231.	L10.	193.	L .05	L .001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE ZN MG/L	26304P IRON EXTRBLE FE MG/L	26305P IRON EXTRBLE. FE MG/L
78-08-03	1240	330	.0004	.0006	--	--	--	--	--	--
79-09-27	0915	330	.0001	.0006	--	--	--	--	--	--
79-11-06	1055	330	.0003	.0005	--	--	--	--	--	--
80-01-04	1020	330	.0003	.0007	--	--	--	--	--	--
80-02-27	1315	330	.0008	.0008	--	--	--	--	--	--
80-05-05	1310	330	.0004	.0005	--	--	--	--	--	--
80-06-03	1110	330	.0003	.0004	--	--	--	--	--	--
80-07-08	1150	330	.0002	.0005	--	--	--	--	--	--
80-11-05	1440	330	.0002	.0005	--	--	--	--	--	--
81-01-09	1045	330	.0002	.0004	--	--	--	--	--	--
81-04-03	1610	330	.0002	.0006	--	--	--	--	--	--
81-05-01	1130	330	.0002	.0004	--	--	--	--	--	--
81-05-29	1310	330	.0015	.0005	--	--	--	--	--	--
81-08-14	1055	330	.0001	.0007	--	--	--	--	--	--
81-10-14	1330	330	.0004	.0010	--	L .010	--	L .001	--	.046
81-12-31	1215	330	.0004	.0004	--	L .010	--	.025	--	.023

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-08-03	1240	330	--	--	38.80	--	--	--
79-09-27	0915	330	--	--	21.60	--	--	--
79-11-06	1055	330	--	--	18.20	--	--	--
80-01-04	1020	330	--	--	17.70	--	--	--
80-01-30	1200	330	--	--	--	--	--	14.70
80-02-27	1315	330	--	--	19.80	--	--	--
80-05-05	1310	330	--	--	344.00	--	--	--
80-05-08	1200	330	--	--	--	--	351.00	--
80-06-03	1110	330	--	--	235.00	--	--	--
80-07-08	1150	330	--	--	68.90	--	--	--
80-11-05	1440	330	--	--	25.80	--	--	--
80-12-31	1200	330	--	--	--	70.80	--	--
81-01-09	1045	330	--	--	41.00	--	--	--
81-04-03	1610	330	--	--	36.10	--	--	--
81-05-01	1130	330	--	--	225.00	--	--	--
81-05-28	1200	330	--	--	--	--	554.00	--
81-05-29	1310	330	--	--	449.00	--	--	--
81-08-14	1055	330	--	--	70.60	--	--	--
81-10-14	1330	330	L .0005	L .001	--	--	--	--
81-12-31	1200	330	--	--	--	87.10	--	14.80
	1215	330	L .0005	L .001	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN. L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NL0005 LAT. 49D 4M 45S LONG. 119D 42M 33S
SIMILKAMEEN RIVER 9.0 KM NORTH OF U.S. BORDER. ROAD BRIDGE EXIT OFF HWY 3A BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG C	02061S TEMP. WATER DEG C.	02061L TEMP. WATER DEG C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-10-24	1300	330	--	8.0	19.2	--	8.1	--	196	50
79-12-10	1050	330	--	2.5	19.9	--	7.8	--	182	1.10
80-02-22	1450	330	--	3.5	20.1	--	8.1	--	193	69
80-04-15	0830	330	17.5	10.0	20.1	8.2	8.1	180	178	3.90
80-04-29	1050	330	19.5	5.5	20.4	--	7.5	--	72.	37.00
80-06-11	1124	330	10.0	--	24.1	--	7.7	--	71	2.70
80-08-05	1047	330	23.0	16.0	24.3	7.3	8.1	180	172	21
80-09-18	1300	330	20.0	14.5	22.6	--	7.6	--	157	48
80-09-25	1645	330	22.5	13.5	18.5	7.8	8.0	165	170	41
80-10-21	0843	330	11.0	9.0	21.5	8.3	8.1	220	193	56
80-12-01	1217	330	4.0	3.0	22.5	7.7	8.0	220	145	70
81-01-28	1245	330	5.0	3.0	20.0	--	7.6	--	155	.31
81-02-09	1245	330	--	1.5	20.7	8.3	7.8	--	194	.31
81-04-06	1118	330	9.0	8.0	18.8	8.6	8.1	280	197	47
81-04-07	1045	330	10.0	7.0	21.0	--	8.1	--	196	54
81-05-14	1030	330	20.0	10.5	22.4	--	7.7	--	106	5.70
81-08-21	1415	330	32.0	20.0	21.5	7.7	8.2	170	167	40
81-09-04	1330	330	20.0	15.0	23.7	--	7.9	--	255	30
81-09-24	1310	330	16.0	10.5	21.8	--	7.9	--	192	30
81-12-01	1313	330	7.5	3.0	21.8	--	8.0	--	196	30

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-10-24	1300	330	5	0	80.8	96.4	29.1	5.8	9	4.4
79-12-10	1050	330	L5	0	75.2	84.2	26.8	4.2	9	4.4
80-02-22	1450	330	L5	0	80.4	89.8	28.2	4.7	9	4.3
80-04-15	0830	330	L5	0	73.5	83.1	26.4	4.2	8	4.2
80-04-29	1050	330	130	0	30.5	36.3	12.8	1.1	5	2.0
80-06-11	1124	330	35	0	30.3	32.7	11.2	1.1	5	1.8
80-08-05	1047	330	10	0	69.0	76.0	29.0	9	1.1	3.8
80-09-18	1300	330	10	.0	68.0	74.0	23.5	3.7	8	3.7
80-09-25	1645	330	10	0	69.0	75.8	23.5	4.2	8	3.7
80-10-21	0843	330	5	.0	78.3	86.2	29.2	3.2	9	4.0
80-12-01	1217	330	15	0	59.8	66.4	21.4	3.1	8	3.2
81-01-28	1245	330	10	0	65.1	73.3	23.0	3.9	6	3.4
81-02-09	1245	330	10	.0	75.2	87.2	26.6	5.0	2.2	4.0
81-04-06	1118	330	10	.0	80.6	85.9	27.7	4.1	1.5	4.3
81-04-07	1045	330	10	.0	78.5	85.9	26.8	4.6	8	4.3
81-05-14	1030	330	20	0	45.1	46.8	14.7	2.5	5	2.5
81-08-21	1415	330	15	.0	68.2	75.4	22.0	5.0	9	3.6
81-09-04	1330	330	15	0	99.3	119.0	31.4	9.9	1.4	5.8
81-09-24	1310	330	10	0	78.6	86.0	25.2	5.6	9	4.2
81-12-01	1313	330	5	.0	81.5	97.3	26.7	7.4	8	4.2

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-10-24	1300	330	1.0	.121	11.8	18.4	.007	--	--	--
79-12-10	1050	330	1.3	.074	11.1	17.9	.059	--	--	--
80-02-22	1450	330	1.2	.085	11.6	17.8	.067	--	--	--
80-04-15	0830	330	1.6	.088	10.6	15.0	.008	--	--	--
80-04-29	1050	330	1.0	L.050	9.8	4.6	.017	--	--	--
80-06-11	1124	330	.5	L.050	10.3	4.5	.002	--	--	--
80-08-05	1047	330	1.3	.068	11.8	12.9	.008	--	--	--
80-09-18	1300	330	1.0	.050	11.0	14.0	.005	--	--	--
80-09-25	1645	330	1.2	.060	11.1	15.0	.004	--	--	--
80-10-21	0843	330	1.3	.070	11.4	15.7	.026	--	--	--
80-12-01	1217	330	1.2	.050	8.9	11.7	.062	--	--	--
81-01-28	1245	330	1.2	.060	11.0	12.5	.054	--	--	--
81-02-09	1245	330	2.0	.090	11.6	14.7	.310	--	--	--
81-04-06	1118	330	1.8	.070	10.9	13.4	.146	--	--	--
81-04-07	1045	330	1.4	.060	10.9	13.6	.007	--	--	--
81-05-14	1030	330	.6	.050	10.6	6.5	L.002	--	--	--
81-08-21	1415	330	.9	.060	12.4	12.0	.005	.071	18.4	L.5
81-09-04	1330	330	2.1	.180	17.0	26.4	.175	.315	25.6	L.3
81-09-24	1310	330	1.1	.070	11.9	14.5	.015	.078	--	--
81-12-01	1313	330	1.1	.950	12.0	15.9	.134	.274	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NL0005 LAT. 49D 4M 45S LONG. 119D 42M 33S
SIMILKAMEEN RIVER 9.0 KM NORTH OF U.S. BORDER. ROAD BRIDGE EXIT OFF HWY 3A. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-10-24	1300	330	--	L10.	133.	L10.	112.	--	--	--
79-12-10	1050	330	--	L10	122.	L10.	108.	--	--	--
80-02-22	1450	330	--	L10.	124.	L10.	112.	--	--	--
80-04-15	0830	330	--	15.	118.	14.	76.	--	--	--
80-04-29	1050	330	--	140	64.	130	42.	--	--	--
80-06-11	1124	330	--	L10.	68.	L10.	44	--	--	--
80-08-05	1047	330	--	L10	115	L10.	101.	--	--	--
80-09-18	1300	330	--	L10	128	L10	104	--	--	--
80-09-25	1645	330	--	L10.	112.	L10.	87.	--	--	--
80-10-21	0843	330	--	L10.	120	L10	100	--	--	--
80-12-01	1217	330	--	L10	91	L10.	79	--	--	--
81-01-28	1245	330	--	L10.	136.	L10	89	--	--	--
81-02-09	1245	330	--	L10	136	L10	101	--	--	--
81-04-06	1118	330	--	L10.	119	L10.	90	--	--	--
81-04-07	1045	330	--	L10	133	L10.	107	--	--	--
81-05-14	1030	330	--	21	81.	18	60	--	--	--
81-08-21	1415	330	--	L10	110	L10	86	L.05	.001	--
81-09-04	1330	330	--	L10.	170	L10	130.	L 05	.001	--
81-09-24	1310	330	--	L10	120	L10	97	L.05	L.001	--
81-12-01	1313	330	--	L10	124	L10	89	L.05	L.001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-10-24	1300	330	.0023	.0003	--	--	--	--	--	--
79-12-10	1050	330	.0026	.0002	--	--	--	--	--	--
80-02-22	1450	330	.0022	.0003	--	--	--	--	--	--
80-04-15	0830	330	.0020	L .0001	--	--	--	--	--	--
80-04-29	1050	330	.0035	L .0001	--	--	--	--	--	--
80-06-11	1124	330	.0010	L .0001	--	--	--	--	--	--
80-08-05	1047	330	.0017	.0002	--	--	--	--	--	--
80-09-18	1300	330	.0023	.0001	--	--	--	--	--	--
80-09-25	1645	330	.0015	.0001	--	--	--	--	--	--
80-10-21	0843	330	.0022	.0001	--	--	--	--	--	--
80-12-01	1217	330	.0010	.0001	--	--	--	--	--	--
81-01-28	1245	330	.0007	.0002	--	--	--	--	--	--
81-02-09	1245	330	.0013	.0002	--	--	--	--	--	--
81-04-06	1118	330	.0011	.0002	--	--	--	--	--	--
81-04-07	1045	330	.0013	.0001	--	--	--	--	--	--
81-05-14	1030	330	.0009	L .0001	--	--	--	--	--	--
81-08-21	1415	330	.0020	.0002	--	.010	--	.001	.05	--
81-09-04	1330	330	.0005	.0001	--	.010	--	.007	--	.043
81-09-24	1310	330	.0022	.0002	--	.010	--	L .001	.06	--
81-12-01	1313	330	.0017	.0002	--	L .010	--	.011	--	.020

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 008CO8NL0005 LAT. 49D 4M 45S LONG. 119D 42M 33S
SIMILKAMEEN RIVER 9.0 KM NORTH OF U.S. BORDER. ROAD BRIDGE EXIT OFF HWY 3A. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-10-24	1300	330	--	--	9.94	--	--	--
79-12-10	1050	330	--	--	17.30	--	--	--
80-01-29	1200	330	--	--	--	--	--	E 5.1
80-02-22	1450	330	--	--	14.50	--	--	--
80-04-15	0830	330	--	--	22.50	--	--	--
80-04-29	1050	330	--	--	262.00	--	--	--
80-05-07	1200	330	--	--	--	--	394.00	--
80-06-11	1124	330	--	--	253.00	--	--	--
80-08-05	1047	330	--	--	26.60	--	--	--
80-09-18	1300	330	--	--	22.10	--	--	--
80-09-25	1645	330	--	--	21.80	--	--	--
80-10-21	0843	330	--	--	14.50	--	--	--
80-12-01	1217	330	--	--	28.60	--	--	--
80-12-31	1200	330	--	--	--	70.00	--	--
81-01-28	1245	330	--	--	35.40	--	--	--
81-02-09	1245	330	--	--	22.10	--	--	--
81-04-06	1118	330	--	--	27.30	--	--	--
81-04-07	1045	330	--	--	27.10	--	--	--
81-05-14	1030	330	--	--	115.00	--	--	--
81-05-26	1200	330	--	--	--	--	399.00	--
81-08-21	1415	330	L 0005	L 001	28.90	--	--	--
81-09-04	1330	330	0005	001	23.50	--	--	--
81-09-24	1310	330	L 0005	L 001	15.30	--	--	--
81-12-01	1313	330	L 0005	L 001	15.10	--	--	--
81-12-30	1200	330	--	--	--	--	--	11.20
81-12-31	1200	330	--	--	--	62.30	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08KM0001 LAT. 49D 7M 4S LONG. 119D 34M 4S
OKANAGAN RIVER AT NO. 18 ROAD BRIDGE OLIVER BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-09-20	1530	330	--	20.0	22.0	--	8.4	--	272	.80
79-09-28	1318	330	--	16.5	19.7	--	8.3	--	278	.38
79-12-03	1210	330	--	3.0	19.7	--	7.9	--	304.	.55
80-02-25	1125	330	--	3.0	20.2	--	8.2	--	311.	2.70
80-06-12	1348	330	16.0	--	24.0	--	8.1	--	185.	1.90
80-10-08	1340	330	19.0	15.5	22.1	--	8.4	--	273.	.56
81-01-28	1115	330	3.5	4.0	20.0	--	7.8	--	286.	.35
81-02-13	1550	330	3.5	3.0	16.5	8.7	8.2	330.	317.	.17
81-04-06	1450	330	8.0	9.0	20.0	--	8.3	--	305.	*25
81-05-14	0955	330	20.0	13.5	22.3	--	8.2	--	255	3.40
81-08-18	1245	330	36.0	26.0	18.9	7.9	8.3	280.	264.	.50
81-09-16	0920	330	22.0	18.0	22.2	--	7.7	--	280	.30
81-10-15	1145	330	13.0	11.0	20.3	8.1	8.0	265.	281	.90
81-12-01	1145	330	8.0	5.0	21.8	--	7.9	--	290	1.60

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-09-20	1530	330	5.	1.0	108.0	123.0	34.2	9.1	2.4	10.3
79-09-28	1318	330	5.	.0	112.0	127.0	33.0	10.8	2.4	10.2
79-12-03	1210	330	L5	.0	123.0	137.0	37.7	10.4	2.6	11.2
80-02-25	1125	330	5.	.0	126.0	140.0	39.5	10.0	2.5	11.2
80-06-12	1348	330	60.	.0	70.6	78.4	23.7	4.7	1.6	7.0
80-10-08	1340	330	15.	1.9	113.0	126.0	34.2	9.9	2.2	10.4
81-01-28	1115	330	10.	.0	116.0	133.0	35.6	10.7	2.2	10.5
81-02-13	1550	330	10.	.0	126.0	140.0	39.3	10.2	2.6	10.9
81-04-06	1450	330	5.	.5	120.0	131.0	38.2	8.6	2.3	10.8
81-05-14	0955	330	15.	.0	99.7	106.0	30.8	7.1	2.0	9.4
81-08-18	1245	330	15.	.0	106.0	115.0	29.9	9.8	2.0	9.6
81-09-16	0920	330	10.	.0	114.0	119.0	33.0	8.9	2.2	9.8
81-10-15	1145	330	15.	.0	111.0	123.0	33.0	9.9	2.2	9.7
81-12-01	1145	330	10.	.0	115.0	133.0	34.6	11.3	2.1	10.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-09-20	1530	330	2.4	.200	3.2	31.0	.091	--	--	--
79-09-28	1318	330	2.5	.220	3.5	30.0	.037	--	--	--
79-12-03	1210	330	2.4	.245	5.0	37.0	.185	--	--	--
80-02-25	1125	330	1.4	.242	4.3	37.0	.177	--	--	--
80-06-12	1348	330	1.9	L.165	7.8	17.5	.053	--	--	--
80-10-08	1340	330	2.2	.080	3.4	28.0	.079	--	--	--
81-01-28	1115	330	2.5	.180	4.3	31.0	.123	--	--	--
81-02-13	1550	330	2.6	.200	4.8	30.5	189	--	--	--
81-04-06	1450	330	2.3	.210	2.9	29.5	.098	--	--	--
81-05-14	0955	330	1.9	.220	2.6	23.8	.023	--	--	--
81-08-18	1245	330	.8	.170	4.8	25.0	.039	.269	27.3	2.4
81-09-16	0920	330	1.9	.200	5.0	26.5	.089	.270	29.0	3.6
81-10-15	1145	330	2.0	.190	5.1	27.5	.095	.327	--	--
81-12-01	1145	330	2.1	2.500	6.4	28.5	.134	.328	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NM0001 LAT. 49D 7M 4S LONG. 119D 34M 4S
OKANAGAN RIVER AT NO. 18 ROAD BRIDGE OLIVER BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-09-20	1530	330	--	L10.	164.	L10.	108	--	--	--
79-09-28	1318	330	--	L10.	175.	L10.	127	--	--	--
79-12-03	1210	330	--	L10.	192.	L10.	158	--	--	--
80-02-25	1125	330	--	L10.	200.	L10.	168	--	--	--
80-06-12	1348	330	--	10.	130.	L10.	92.	--	--	--
80-10-08	1340	330	--	L10.	160.	L10.	120.	--	--	--
81-01-28	1115	330	--	L10.	215.	L10.	163	--	--	--
81-02-13	1550	330	--	L10.	192.	L10.	156	--	--	--
81-04-06	1450	330	--	L10.	124.	L10.	108.	--	--	--
81-05-14	0955	330	--	27.	165.	21.	123.	--	--	--
81-08-18	1245	330	--	L10.	180.	L10.	140	05	.001	--
81-09-16	0920	330	--	L10.	160.	L10.	150	L .05	L .001	--
81-10-15	1145	330	--	L10.	160.	L10.	120	L .05	.001	--
81-12-01	1145	330	--	L10.	170.	L10.	114.	L 05	L .001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-09-20	1530	330	.0006	.0003	--	--	--	--	--	--
79-09-28	1318	330	.0006	.0003	--	--	--	--	--	--
79-12-03	1210	330	.0007	.0003	--	--	--	--	--	--
80-02-25	1125	330	.0006	.0004	--	--	--	--	--	--
80-06-12	1348	330	.0004	.0001	--	--	--	--	--	--
80-10-08	1340	330	.0004	.0004	--	--	--	--	--	--
81-01-28	1115	330	.0004	.0003	--	--	--	--	--	--
81-02-13	1550	330	.0004	.0003	--	--	--	--	--	--
81-04-06	1450	330	.0004	.0003	--	--	--	--	--	--
81-05-14	0955	330	.0004	.0002	--	--	--	--	--	--
81-08-18	1245	330	.0002	.0002	--	.020	--	001	--	053
81-09-16	0920	330	.0004	.0003	--	010	--	001	07	--
81-10-15	1145	330	.0005	.0003	--	L 010	--	L 001	--	050
81-12-01	1145	330	.0002	.0002	--	.020	--	007	--	.035

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-09-20	1530	330	--	--	10.40	--	--	--
79-09-28	1318	330	--	--	10.40	--	--	--
79-12-03	1210	330	--	--	5.47	--	--	--
80-01-06	1200	330	--	--	--	--	--	3.79
80-02-25	1125	330	--	--	5.10	--	--	--
80-06-12	1348	330	--	--	15.60	--	--	--
80-06-16	1200	330	--	--	--	--	26.80	--
80-10-08	1340	330	--	--	14.50	--	--	--
80-12-31	1200	330	--	--	--	11.50	--	--
81-01-28	1115	330	--	--	9.09	--	--	--
81-02-13	1550	330	--	--	5.61	--	--	--
81-02-17	1200	330	--	--	--	--	--	4.90
81-04-06	1450	330	--	--	6.91	--	--	--
81-05-14	0955	330	--	--	32.60	--	--	--
81-06-14	1200	330	--	--	--	--	72.80	--
81-08-18	1245	330	.0005	.001	37.40	--	--	--
81-09-16	0920	330	L.0005	L.001	14.20	--	--	--
81-10-15	1145	330	L.0005	L.001	16.70	--	--	--
81-12-01	1145	330	L.0005	L.001	11.40	--	--	--
81-12-31	1200	330	--	--	--	22.50	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NN0010 LAT. 49D 0M 6S LONG. 118D 45M 38S
BOUNDARY CREEK AT MIDWAY. HWY BRIDGE 0.25KM NORTH OF U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-09-20	1330	330	--	14.5	22.1	--	8.6	--	288.	.50
79-10-09	1500	330	--	9.0	20.9	--	8.3	--	304.	.51
79-12-14	1400	330	--	1.0	19.3	8.4	8.0	300.	303.	.34
80-01-08	1500	330	--	.1	20.1	--	8.2	--	327.	.33
80-02-20	1515	330	3.0	.5	20.1	--	8.2	--	282.	2.00
80-04-01	1330	330	11.0	8.0	20.6	--	8.3	--	256.	.58
80-04-14	1615	330	13.0	13.0	21.8	8.3	8.0	170.	189.	6.20
80-05-14	1215	330	16.5	8.5	20.0	--	7.7	--	98.	2.80
80-06-26	1400	330	17.0	12.5	21.2	--	7.9	--	160.	1.70
80-07-30	1130	330	26.0	15.0	24.2	--	8.2	--	247.	.35
80-08-05	1300	330	28.0	14.0	24.4	7.0	8.3	270.	264.	.25
80-09-15	1140	330	19.0	12.0	21.4	--	8.0	--	250.	.20
80-09-25	1515	330	24.0	10.5	18.4	8.2	8.2	295.	274.	.36
80-10-21	0841	330	9.0	8.0	20.5	8.5	8.3	340.	314.	.55
80-12-01	1359	330	1.0	3.0	22.7	8.6	8.2	300.	291.	.40
81-02-09	1410	330	--	1.0	20.9	7.7	7.9	260.	245.	.22
81-03-31	1445	330	8.0	5.0	18.2	--	7.9	--	200.	.30
81-04-06	1258	330	8.0	6.0	20.8	8.3	8.1	200.	195.	.39
81-05-05	1320	330	18.0	7.0	17.6	--	7.3	--	107.	4.00
81-06-16	1343	330	21.0	11.0	21.6	--	7.5	--	123.	1.00
81-08-20	1815	330	25.0	18.5	21.5	8.0	8.2	240.	227.	.60

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-09-20	1330	330	5.	3.5	105.0	138.0	41.2	8.5	1.7	6.6
79-10-09	1500	330	L5.	.0	113.0	145.0	44.1	8.5	1.8	7.3
79-12-14	1400	330	L5.	.0	107.0	139.0	41.3	8.7	4.6	5.8
80-01-08	1500	330	L5.	.0	121.0	155.0	47.3	9.0	1.8	7.7
80-02-20	1515	330	L5.	.0	102.0	129.0	38.2	8.2	1.8	7.7
80-04-01	1330	330	5.	.0	97.6	121.0	35.9	7.6	1.6	6.0
80-04-14	1615	330	10.	.0	72.3	87.2	28.0	4.2	1.3	4.4
80-05-14	1215	330	40.	.0	35.0	42.9	16.5	.4	.8	2.6
80-06-26	1400	330	15.	.0	65.4	75.2	24.9	3.2	1.2	4.2
80-07-30	1130	330	15.	.0	96.8	114.0	32.0	8.3	1.4	5.4
80-08-05	1300	330	10.	.0	95.0	117.0	43.6	2.0	2.1	6.0
80-09-15	1140	330	15.	.0	96.7	118.0	35.4	7.2	1.7	5.8
80-09-25	1515	330	10.	.0	108.9	133.0	40.4	7.8	1.6	6.5
80-10-21	0841	330	10.	.0	118.0	145.0	44.5	8.2	1.8	7.0
80-12-01	1359	330	10.	.0	108.0	135.0	40.7	8.1	1.9	6.6
81-02-09	1410	330	5.	.0	90.3	113.0	34.1	6.8	1.6	5.7
81-03-31	1445	330	20.	.0	73.9	87.4	27.6	4.5	1.1	4.4
81-04-06	1258	330	20.	.0	72.8	84.5	26.5	4.5	1.1	4.5
81-05-05	1320	330	35.	.0	38.7	47.2	15.1	2.3	.7	2.8
81-06-16	1343	330	25.	.0	46.2	54.5	17.2	2.8	.7	2.0
81-08-20	1815	330	15.	.0	86.9	107.0	28.3	8.8	1.4	5.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-09-20	1330	330	3.2	.230	16.7	38.0	.260	--	--	--
79-10-09	1500	330	3.3	.248	16.6	41.5	.270	--	--	--
79-12-14	1400	330	5.5	.215	16.3	34.0	.460	--	--	--
80-01-08	1500	330	3.3	.210	18.4	45.0	.640	--	--	--
80-02-20	1515	330	5.1	.212	15.4	36.0	.500	--	--	--
80-04-01	1330	330	2.9	.235	15.1	26.0	.260	--	--	--
80-04-14	1615	330	1.2	.210	16.0	19.0	.250	--	--	--
80-05-14	1215	330	.7	.140	14.5	9.2	.050	--	--	--
80-06-26	1400	330	1.1	.169	16.6	15.6	.045	--	--	--
80-07-30	1130	330	1.6	.204	17.2	28.5	.002	--	--	--
80-08-05	1300	330	2.9	.224	17.2	31.0	.280	--	--	--
80-09-15	1140	330	2.3	.250	17.0	27.0	.200	--	--	--
80-09-25	1515	330	2.7	.210	17.2	32.5	.240	--	--	--
80-10-21	0841	330	3.2	.210	16.3	38.0	.300	--	--	--
80-12-01	1359	330	3.1	.200	16.8	36.0	.470	--	--	--
81-02-09	1410	330	2.4	.220	16.1	27.5	.420	--	--	--
81-03-31	1445	330	1.2	.180	15.8	18.0	.160	--	--	--
81-04-06	1258	330	1.2	.180	16.2	17.2	.161	--	--	--
81-05-05	1320	330	.7	.170	15.6	9.9	.081	--	--	--
81-06-16	1343	330	.6	.160	15.5	11.3	.023	--	--	--
81-08-20	1815	330	1.6	.170	16.9	23.0	.141	.279	23.3	1.7

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NN0010 LAT. 49D 0M 8S LONG. 118D 45M 38S
BOUNDARY CREEK AT MIDWAY. HWY BRIDGE 0.25KM NORTH OF U.S BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-09-20	1330	330	--	L10.	192.	L10.	162.	--	--	--
79-10-09	1500	330	--	L10.	205.	L10	192	--	--	--
79-12-14	1400	330	--	L10.	189.	L10.	159	--	--	--
80-01-08	1500	330	--	L10.	213.	L10.	181.	--	--	--
80-02-20	1515	330	--	L10.	189.	L10.	159.	--	--	--
80-04-01	1330	330	--	L10.	186.	L10.	147.	--	--	--
80-04-14	1615	330	--	35.	133.	30.	95	--	--	--
80-05-14	1215	330	--	18.	110.	12.	70.	--	--	--
80-06-26	1400	330	--	L10.	110.	L10.	89	--	--	--
80-07-30	1130	330	--	L10.	110.	L10.	93	--	--	--
80-08-05	1300	330	--	L10.	176.	L10.	161.	--	--	--
80-09-15	1140	330	--	L10.	169.	L10.	146.	--	--	--
80-09-25	1515	330	--	L10.	197.	L10.	163.	--	--	--
80-10-21	0641	330	--	L10.	190.	L10	170.	--	--	--
80-12-01	1359	330	--	L10.	181.	L10	164	--	--	--
81-02-09	1410	330	--	L10.	170.	L10	142.	--	--	--
81-03-31	1445	330	--	L10.	140.	L10.	117.	--	--	--
81-04-06	1258	330	--	L10.	132.	L10	108.	--	--	--
81-05-05	1320	330	--	18.	86.	13.	62.	--	--	--
81-06-16	1343	330	--	L10.	101.	L10	88.	--	--	--
81-08-20	1815	330	--	L10.	160.	L10.	120.	05	001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE FE MG/L
79-09-20	1330	330	.0009	.0001	--	--	--	--	--	--
79-10-09	1500	330	.0006	0002	--	--	--	--	--	--
79-12-14	1400	330	.0003	.0001	--	--	--	--	--	--
80-01-08	1500	330	.0005	.0002	--	--	--	--	--	--
80-02-20	1515	330	.0005	.0003	--	--	--	--	--	--
80-04-01	1330	330	.0005	.0002	--	--	--	--	--	--
80-04-14	1615	330	.0005	.0001	--	--	--	--	--	--
80-05-14	1215	330	.0003	.0001	--	--	--	--	--	--
80-06-26	1400	330	.0004	.0001	--	--	--	--	--	--
80-07-30	1130	330	.0005	.0002	--	--	--	--	--	--
80-08-05	1300	330	.0006	.0002	--	--	--	--	--	--
80-09-15	1140	330	.0005	.0001	--	--	--	--	--	--
80-09-25	1515	330	.0004	.0001	--	--	--	--	--	--
80-10-21	0641	330	.0004	.0002	--	--	--	--	--	--
80-12-01	1359	330	.0003	.0007	--	--	--	--	--	--
81-02-09	1410	330	.0004	0001	--	--	--	--	--	--
81-03-31	1445	330	.0003	.0001	--	--	--	--	--	--
81-04-06	1258	330	.0003	.0001	--	--	--	--	--	--
81-05-05	1320	330	.0002	.0001	--	--	--	--	--	--
81-06-16	1343	330	.0003	.0001	--	--	--	--	--	--
81-08-20	1815	330	.0004	.0001	--	.010	--	001	12	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-09-20	1330	330	--	--	.32	--	--	--
79-10-09	1500	330	--	--	.24	--	--	--
79-12-14	1400	330	--	--	.29	--	--	--
80-01-08	1500	330	--	--	.26	--	--	--
81-08-20	1815	330	.0005	.001	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08WN0011 KETTLE RIVER AT MIDWAY. BRIDGE 0.5KM NORTH OF U.S. BORDER. LAT. 49D 0M 18S LONG. 118D 46M 28S BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060 TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-10-09	1520	330	14.0	10.5	20.9	--	8.1	--	181.	.65
79-12-14	1300	330	--	.5	19.3	8.2	7.8	205.	187.	.27
80-01-08	1515	330	--	.1	20.3	--	8.3	--	206.	.45
80-02-20	1545	330	3.0	.5	20.1	--	8.1	--	179.	1.40
80-04-01	1345	330	11.0	7.5	20.6	--	8.2	--	173.	.60
80-04-14	1600	330	13.0	10.5	18.5	8.5	8.1	150.	144.	3.00
80-05-14	1430	330	20.0	9.5	20.1	--	7.4	--	52.	3.40
80-06-26	1415	330	19.0	14.0	21.1	--	7.7	--	100.	2.50
80-07-30	1143	330	25.0	19.0	24.4	--	7.9	--	125.	.14
80-08-05	1249	330	28.0	18.0	24.5	7.3	8.1	140.	130.	.42
80-09-15	1220	330	19.0	14.0	21.3	--	7.9	--	131.	.21
80-09-25	1430	330	24.0	11.0	18.9	7.9	8.0	130.	130.	.29
80-10-21	0652	330	9.0	8.0	21.4	8.6	8.1	190	149.	.55
80-12-01	1348	330	1.0	2.0	22.6	8.7	8.1	180.	146.	.40
81-02-09	1422	330	--	.5	20.3	7.8	7.7	130.	128.	.28
81-03-31	1438	330	8.0	6.5	18.3	--	7.9	--	127.	.50
81-04-06	1245	330	8.0	8.0	18.9	8.5	8.0	160	126.	.68
81-05-05	1315	330	18.0	6.0	17.8	--	7.1	--	66.	4.30
81-06-16	1355	330	21.0	11.0	21.8	--	7.2	--	63.	1.60
81-08-20	1745	330	25.0	20.5	21.5	7.7	8.0	110	113.	.30
81-09-04	1400	330	21.0	16.0	23.8	--	7.7	--	111.	.30

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-10-09	1520	330	L5.	.0	81.2	85.5	26.5	4.7	.9	1.5
79-12-14	1300	330	L5.	.0	84.0	86.4	27.0	4.6	1.1	5.2
80-01-08	1515	330	L5.	.0	94.1	97.7	30.1	5.5	1.1	5.9
80-02-20	1545	330	L5.	.0	80.2	83.4	25.9	4.5	.9	5.0
80-04-01	1345	330	L5	.0	77.3	81.3	25.0	4.5	1.0	5.0
80-04-14	1600	330	5	.0	62.8	66.1	21.1	3.3	1.1	4.5
80-05-14	1430	330	45.	.0	22.6	22.5	8.7	.2	.4	1.9
80-06-26	1415	330	15.	.0	44.1	47.9	14.9	2.6	.7	3.1
80-07-30	1143	330	15.	.0	54.7	54.0	17.5	2.5	.8	3.5
80-08-05	1249	330	15.	.0	57.3	57.2	17.9	3.0	.8	3.6
80-09-15	1220	330	10.	.0	56.9	57.8	17.8	3.2	.9	3.5
80-09-25	1430	330	15.	.0	56.7	57.2	17.1	3.5	.8	3.5
80-10-21	0652	330	10.	0	70.0	69.8	22.6	3.2	.9	4.2
80-12-01	1348	330	10.	.0	65.4	66.8	20.5	3.8	1.2	3.1
81-02-09	1422	330	5	0	56.4	60.0	18.4	3.4	.7	3.7
81-03-31	1438	330	20.	.0	53.4	56.6	17.7	3.0	.8	3.7
81-04-06	1245	330	20.	0	53.9	56.6	18.0	2.8	.8	3.7
81-05-05	1315	330	35	0	26.7	28.9	10.2	.8	.5	2.1
81-06-16	1355	330	30.	.0	25.0	27.3	8.7	1.4	.6	2.0
81-08-20	1745	330	20.	.0	49.7	51.6	15.7	3.0	.7	3.2
81-09-04	1400	330	15.	.0	47.6	51.6	12.6	4.9	.8	3.1

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-10-09	1520	330	.6	.310	11.8	12.2	.007	--	--	--
79-12-14	1300	330	.8	.320	12.4	11.2	.058	--	--	--
80-01-08	1515	330	.8	.380	13.1	14.2	.053	--	--	--
80-02-20	1545	330	.9	.330	12.1	11.3	.074	--	--	--
80-04-01	1345	330	1.4	.320	11.4	11.7	.031	--	--	--
80-04-14	1600	330	1.5	.270	12.4	8.0	.016	--	--	--
80-05-14	1430	330	.6	.100	10.2	2.9	L.002	--	--	--
80-06-26	1415	330	.6	.155	13.0	4.4	L.002	--	--	--
80-07-30	1143	330	.5	.200	12.8	6.5	.040	--	--	--
80-08-05	1249	330	.5	.214	12.9	5.3	.015	--	--	--
80-09-15	1220	330	.6	.220	12.4	7.0	.008	--	--	--
80-09-25	1430	330	.9	.230	12.1	7.0	.005	--	--	--
80-10-21	0652	330	1.0	.240	11.8	8.2	.019	--	--	--
80-12-01	1348	330	1.2	.210	12.1	8.8	.139	--	--	--
81-02-09	1422	330	.7	.210	12.4	6.9	.057	--	--	--
81-03-31	1438	330	.9	.200	13.0	6.3	.012	--	--	--
81-04-06	1245	330	.9	.140	13.2	6.0	.026	--	--	--
81-05-05	1315	330	.6	.160	12.4	3.0	.014	--	--	--
81-06-16	1355	330	.5	.140	11.2	2.9	L.002	--	--	--
81-08-20	1745	330	.6	.150	12.4	5.0	.022	.148	13.5	2.1
81-09-04	1400	330	.5	.130	12.2	4.5	.041	.118	12.9	1.5

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NN0011
KETTLE RIVER AT MIDWAY. BRIDGE 0.5KM NORTH OF U.S. BORDER. LAT. 49D 0M 16S LONG. 118D 46M 28S BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-10-09	1520	330	--	L10.	124.	L10.	100.	--	--	--
79-12-14	1300	330	--	L10.	113.	L10.	105.	--	--	--
80-01-08	1515	330	--	L10.	126.	L10.	105.	--	--	--
80-02-20	1545	330	--	L10.	118.	L10.	106.	--	--	--
80-04-01	1345	330	--	L10.	125.	L10.	98.	--	--	--
80-04-14	1600	330	--	17.	96.	12.	58.	--	--	--
80-05-14	1430	330	--	10.	60.	L10.	36.	--	--	--
80-06-28	1415	330	--	L10.	100.	L10.	49.	--	--	--
80-07-30	1143	330	--	L10.	87.	L10.	70.	--	--	--
80-08-05	1249	330	--	L10.	87.	L10.	76.	--	--	--
80-09-15	1220	330	--	L10.	85.	L10.	64.	--	--	--
80-09-25	1430	330	--	L10.	95.	L10.	62.	--	--	--
80-10-21	0652	330	--	L10.	84.	L10.	74.	--	--	--
80-12-01	1348	330	--	L10.	88.	L10.	81.	--	--	--
81-02-09	1422	330	--	L10.	97.	L10.	75.	--	--	--
81-03-31	1438	330	--	L10.	84.	L10.	65.	--	--	--
81-04-06	1246	330	--	L10.	90.	L10.	59.	--	--	--
81-05-05	1315	330	--	24.	74.	19.	37.	--	--	--
81-06-16	1355	330	--	L10.	59.	L10.	39.	--	--	--
81-08-20	1745	330	--	L10.	89.	L10.	63.	L.05	L.001	--
81-09-04	1400	330	--	L10.	95.	L10.	66.	L.05	L.001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-10-09	1520	330	.0007	.0001	--	--	--	--	--	--
79-12-14	1300	330	.0008	.0002	--	--	--	--	--	--
80-01-08	1515	330	.0009	.0001	--	--	--	--	--	--
80-02-20	1545	330	.0006	.0001	--	--	--	--	--	--
80-04-01	1345	330	.0006	.0002	--	--	--	--	--	--
80-04-14	1600	330	.0005	L.0001	--	--	--	--	--	--
80-05-14	1430	330	.0002	L.0001	--	--	--	--	--	--
80-06-28	1415	330	.0003	.0001	--	--	--	--	--	--
80-07-30	1143	330	.0003	.0001	--	--	--	--	--	--
80-08-05	1249	330	.0003	.0001	--	--	--	--	--	--
80-09-15	1220	330	.0003	.0001	--	--	--	--	--	--
80-09-25	1430	330	.0003	L.0001	--	--	--	--	--	--
80-10-21	0652	330	.0004	.0001	--	--	--	--	--	--
80-12-01	1348	330	.0003	L.0001	--	--	--	--	--	--
81-02-09	1422	330	.0003	.0001	--	--	--	--	--	--
81-03-31	1438	330	.0002	.0001	--	--	--	--	--	--
81-04-06	1246	330	.0002	L.0001	--	--	--	--	--	--
81-05-05	1315	330	.0001	L.0001	--	--	--	--	--	--
81-06-16	1355	330	.0001	L.0001	--	--	--	--	--	--
81-08-20	1745	330	.0003	L.0001	--	.010	--	L.001	.05	--
81-09-04	1400	330	.0005	L.0001	--	.010	--	.007	--	.045

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NN0011 LAT. 49D 0M 16S LONG. 118D 48M 28S
KETTLE RIVER AT MIDWAY. BRIDGE 0.5KM NORTH OF U.S. BORDER. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-10-09	1520	330	--	--	3.00	--	--	--
80-01-08	1200	330	--	--	--	--	--	1.56
80-02-20	1545	330	--	--	2.35	--	--	--
80-04-01	1345	330	--	--	8.04	--	--	--
80-04-14	1600	330	--	--	19.40	--	--	--
80-05-07	1200	330	--	--	--	--	379.00	--
80-05-14	1430	330	--	--	179.00	--	--	--
80-06-25	1415	330	--	--	61.20	--	--	--
80-07-30	1143	330	--	--	16.90	--	--	--
80-08-05	1249	330	--	--	14.30	--	--	--
80-09-15	1220	330	--	--	15.00	--	--	--
80-09-25	1430	330	--	--	11.50	--	--	--
80-10-21	0852	330	--	--	7.45	--	--	--
80-12-01	1348	330	--	--	8.10	--	--	--
80-12-31	1200	330	--	--	--	41.20	--	--
81-01-17	1200	330	--	--	--	--	--	5.35
81-03-31	1438	330	--	--	28.00	--	--	--
81-04-06	1248	330	--	--	28.88	--	--	--
81-05-05	1315	330	--	--	148.95	--	--	--
81-05-26	1200	330	--	--	--	--	382.00	--
81-06-16	1355	330	--	--	175.00	--	--	--
81-08-20	1745	330	L.0005	L.001	22.90	--	--	--
81-09-04	1400	330	L.0005	.001	19.90	--	--	--
81-12-31	1200	330	--	--	--	57.80	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN. L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC0BNN0021 LAT. 49D 0M 0S LONG. 118D 29M 48S
KETTLE RIVER AT U.S. BORDER, CARSON ROAD BRIDGE 5KM SW OF GRAND FORKS BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT USIE/CM	02073L TURBIDITY JTU
79-10-10	1145	330	--	11.5	19.3	--	8.1	--	218	90
79-12-14	1100	330	--	1.0	19.6	8.2	7.9	240	233	30
80-01-08	1040	330	-10.0	.0	20.3	--	8.2	--	250	44
80-03-26	1320	330	--	5.5	20.7	--	8.3	--	214	78
80-04-14	1515	330	12.0	12.0	22.4	8.7	8.3	185	189	3.70
80-04-30	1330	330	--	5.0	22.1	--	7.1	--	52	17.50
80-05-21	1060	330	18.0	10.0	21.3	--	7.5	--	82	1.40
80-06-27	1130	330	18.0	13.0	21.2	--	7.6	--	123	1.80
80-08-05	1352	330	31.0	19.0	24.3	7.2	8.2	205	186	.23
80-09-03	1315	330	15.0	19.0	21.3	--	8.0	--	198	.44
80-09-25	1330	330	24.5	14.0	19.6	7.8	8.0	135	163	.28
80-10-14	1445	330	8.0	8.5	22.2	--	8.2	--	190	.84
80-11-25	1451	330	2.0	.5	22.7	--	8.0	--	201	.20
80-12-01	1459	330	1.0	2.0	22.9	8.5	8.1	240	202	.70
81-01-13	1428	330	2.0	.5	19.6	--	8.0	--	174	.25
81-02-09	1521	330	--	.5	16.5	7.7	7.9	200	179	.17
81-02-13	1045	330	--	--	21.1	--	7.9	--	195	.18
81-03-05	1301	330	5.0	2.0	21.3	--	8.1	--	179	.55
81-04-06	1352	330	8.5	8.5	18.8	5.8	8.1	180	161	.59
81-04-07	0922	330	9.0	4.0	18.8	--	8.1	--	161	.50
81-05-22	1255	330	19.0	9.5	23.6	--	7.0	--	51	23.00
81-08-13	1315	330	17.0	12.0	15.5	--	7.7	--	94	1.40
81-08-20	1645	330	29.0	22.5	21.3	7.8	8.1	135	140	.40
81-10-07	1507	330	10.0	11.0	15.7	--	7.9	--	144	.30

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-10-10	1145	330	LS	.0	98.8	109.0	30.2	8.2	1.1	6.5
79-12-14	1100	330	LS	.0	104.0	109.0	32.8	6.6	1.3	6.7
80-01-08	1040	330	5	.0	115.0	117.0	35.6	6.8	1.3	7.4
80-03-26	1320	330	5	.0	95.6	99.2	29.4	6.3	1.4	6.2
80-04-14	1515	330	LS	.0	82.7	86.2	26.8	4.7	1.2	5.7
80-04-30	1330	330	110	.0	19.3	23.9	8.5	.5	.8	1.8
80-05-21	1060	330	40	.0	33.1	37.9	13.9	.8	.6	2.4
80-06-27	1130	330	15	.0	95.5	81.9	17.7	3.0	.9	3.5
80-08-05	1352	330	15	.0	77.3	80.0	24.9	4.3	1.6	5.3
80-09-03	1315	330	10	.0	87.6	90.0	26.7	5.7	1.2	5.8
80-09-25	1330	330	10	.0	73.9	74.2	22.2	4.6	1.1	4.8
80-10-14	1445	330	10	.0	87.4	89.2	27.1	5.2	1.2	5.7
80-11-25	1451	330	5	.0	85.7	87.4	25.1	6.0	1.1	5.5
80-12-01	1459	330	5	.0	84.7	88.2	27.3	4.9	1.3	5.5
81-01-13	1428	330	10	.0	78.1	81.6	24.1	5.2	.9	5.1
81-02-09	1521	330	10	.0	77.2	81.6	24.5	5.0	1.0	5.0
81-02-13	1045	330	10	.0	83.3	88.8	25.7	6.0	1.1	5.5
81-03-05	1301	330	10	.0	75.1	80.0	24.5	4.6	.9	5.0
81-04-06	1352	330	20	.0	67.8	70.9	22.0	3.9	1.1	4.6
81-04-07	0922	330	20	.0	68.8	72.2	22.3	4.0	.9	4.6
81-05-22	1255	330	40	.0	18.6	21.5	7.0	1.0	.7	1.5
81-08-13	1315	330	25	.0	36.5	42.7	12.8	2.6	.6	2.5
81-08-20	1645	330	15	.0	62.0	59.6	17.3	4.0	.8	3.8
81-10-07	1507	330	20	.0	62.1	67.5	17.3	5.9	.9	4.0

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08HN0021 LAT. 49D 0M 0S LONG. 118D 29M 48S
KETTLE RIVER AT U.S. BORDER CARSON ROAD BRIDGE 5KM SW OF GRAND FORKS BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-10-10	1145	330	1.1	.378	11.6	16.2	.023	--	--	--
79-12-14	1100	330	1.1	.350	12.9	16.5	.117	--	--	--
80-01-08	1040	330	1.2	.340	13.0	16.9	.147	--	--	--
80-03-28	1320	330	1.8	.310	9.0	15.6	L.002	--	--	--
80-04-14	1515	330	1.7	.275	11.3	14.0	.002	--	--	--
80-04-30	1330	330	.8	.110	10.6	4.3	.032	--	--	--
80-05-21	1050	330	.8	.115	11.5	5.3	.024	--	--	--
80-06-27	1130	330	.7	.176	13.8	6.1	.012	--	--	--
80-08-05	1352	330	1.4	.228	12.8	8.5	.017	--	--	--
80-09-03	1315	330	1.2	.266	13.0	10.0	.008	--	--	--
80-09-25	1330	330	1.1	.230	12.2	10.6	.025	--	--	--
80-10-14	1445	330	1.2	.230	12.8	11.7	.010	--	--	--
80-11-25	1451	330	1.2	.270	13.1	12.1	.081	--	--	--
80-12-01	1459	330	1.3	.200	12.7	12.1	.148	--	--	--
81-01-13	1428	330	1.2	.230	12.2	11.5	.090	--	--	--
81-02-09	1521	330	1.1	.220	13.5	11.0	.105	--	--	--
81-02-13	1045	330	1.1	.240	13.6	12.2	.116	--	--	--
81-03-05	1301	330	1.2	.240	12.2	9.6	.064	--	--	--
81-04-06	1352	330	1.3	.230	13.8	8.9	.044	--	--	--
81-04-07	0922	330	1.4	.230	13.8	9.1	.033	--	--	--
81-05-22	1255	330	.6	.120	10.4	2.7	.015	--	--	--
81-08-13	1315	330	.5	.120	11.7	5.4	.015	--	--	--
81-08-20	1645	330	.7	.160	13.0	7.3	.030	.140	16.4	2.0
81-10-07	1507	330	.7	.160	12.6	8.2	.091	.198	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-10-10	1145	330	--	L10.	146.	L10.	113.	--	--	--
79-12-14	1100	330	--	L10.	135.	L10.	128.	--	--	--
80-01-08	1040	330	--	L10.	152.	L10.	120.	--	--	--
80-03-28	1320	330	--	L10.	142.	L10.	94.	--	--	--
80-04-14	1515	330	--	24.	121.	20.	99.	--	--	--
80-04-30	1330	330	--	85.	55.	76.	30.	--	--	--
80-05-21	1050	330	--	15.	88.	12.	52.	--	--	--
80-06-27	1130	330	--	L10.	100.	L10.	68.	--	--	--
80-08-05	1352	330	--	L10.	124.	L10.	101.	--	--	--
80-09-03	1315	330	--	L10.	131.	L10.	98.	--	--	--
80-09-25	1330	330	--	L10.	111.	L10.	82.	--	--	--
80-10-14	1445	330	--	L10.	110.	L10.	83.	--	--	--
80-11-25	1451	330	--	L10.	115.	L10.	103.	--	--	--
80-12-01	1459	330	--	L10.	139.	L10.	105.	--	--	--
81-01-13	1428	330	--	L10.	105.	L10.	99.	--	--	--
81-02-09	1521	330	--	L10.	148.	L10.	98.	--	--	--
81-02-13	1045	330	--	L10.	141.	L10.	111.	--	--	--
81-03-05	1301	330	--	L10.	131.	L10.	88.	--	--	--
81-04-06	1352	330	--	L10.	112.	L10.	90.	--	--	--
81-04-07	0922	330	--	L10.	120.	L10.	98.	--	--	--
81-05-22	1255	330	--	98.	49.	86.	21.	--	--	--
81-08-13	1315	330	--	L10.	66.	L10.	42.	--	--	--
81-08-20	1645	330	--	L10.	100.	L10.	80.	L.05	L.001	--
81-10-07	1507	330	--	L10.	91.	L10.	74.	--	.008	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08EC08NN0021 LAT 49D 09M 05S LONG 118D 29M 48S
KETTLE RIVER AT U.S. BORDER, CARSON ROAD BRIDGE 5KM SW OF GRAND FORKS BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL ZN MG/L	30305P ZINC EXTRBLE ZN MG/L	26304P IRON EXTRBLE FE MG/L	26305P IRON EXTRBLE FE MG/L
79-10-10	1145	330	.0002	.0002	--	--	--	--	--	--
79-12-14	1100	330	.0008	.0003	--	--	--	--	--	--
80-01-08	1040	330	.0009	.0003	--	--	--	--	--	--
80-03-28	1320	330	.0006	.0002	--	--	--	--	--	--
80-04-14	1515	330	.0006	.0001	--	--	--	--	--	--
80-04-30	1330	330	.0004	L.0001	--	--	--	--	--	--
80-05-21	1050	330	.0003	L.0001	--	--	--	--	--	--
80-06-27	1130	330	.0004	L.0001	--	--	--	--	--	--
80-08-05	1352	330	.0006	.0002	--	--	--	--	--	--
80-09-03	1315	330	.0005	.0001	--	--	--	--	--	--
80-09-25	1330	330	.0004	L.0001	--	--	--	--	--	--
80-10-14	1445	330	.0005	.0001	--	--	--	--	--	--
80-11-25	1451	330	.0007	.0001	--	--	--	--	--	--
80-12-01	1459	330	.0007	.0001	--	--	--	--	--	--
81-01-13	1428	330	.0005	.0002	--	--	--	--	--	--
81-02-09	1521	330	.0004	.0001	--	--	--	--	--	--
81-02-13	1045	330	.0006	.0001	--	--	--	--	--	--
81-03-05	1301	330	.0004	.0001	--	--	--	--	--	--
81-04-06	1352	330	.0004	L.0001	--	--	--	--	--	--
81-04-07	0922	330	.0004	L.0001	--	--	--	--	--	--
81-05-22	1255	330	.0004	L.0001	--	--	--	--	--	--
81-08-13	1315	330	.0002	L.0001	--	--	--	--	--	--
81-08-20	1645	330	.0003	.0001	--	.020	--	L.001	07	--
81-10-07	1507	330	.0006	L.0001	--	L.010	--	.018	07	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-10-10	1145	330	--	--	4.56	--	--	--
79-12-14	1100	330	--	--	4.73	--	--	--
80-01-07	1200	330	--	--	--	--	--	2.37
80-01-08	1040	330	--	--	4.23	--	--	--
80-03-28	1320	330	--	--	14.10	--	--	--
80-04-14	1515	330	--	--	17.50	--	--	--
80-04-30	1200	330	--	--	--	--	400.00	--
	1330	330	--	--	400.00	--	--	--
80-05-21	1050	330	--	--	164.60	--	--	--
80-06-27	1130	330	--	--	79.50	--	--	--
80-08-05	1352	330	--	--	20.04	--	--	--
80-09-03	1315	330	--	--	11.64	--	--	--
80-09-25	1330	330	--	--	14.71	--	--	--
80-10-14	1445	330	--	--	10.58	--	--	--
80-11-25	1451	330	--	--	9.16	--	--	--
80-12-01	1459	330	--	--	11.58	--	--	--
80-12-31	1200	330	--	--	--	49.14	--	--
81-01-13	1428	330	--	--	12.67	--	--	--
81-02-13	1045	330	--	--	13.12	--	--	--
81-03-05	1301	330	--	--	22.60	--	--	--
81-04-06	1352	330	--	--	38.30	--	--	--
81-04-07	0922	330	--	--	40.10	--	--	--
81-05-22	1255	330	--	--	344.00	--	--	--
81-05-27	1200	330	--	--	--	--	416.00	--
81-08-13	1315	330	--	--	40.00	--	--	--
81-08-20	1645	330	L.0005	.001	33.00	--	--	--
81-10-07	1507	330	L.0005	.003	21.20	--	--	--
81-12-14	1200	330	--	--	--	--	--	5.90
81-12-31	1200	330	--	--	--	66.80	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NN0022 LAT. 49D 0M 29S LONG. 118D 18M 11S
KETTLE RIVER AT GILPIN FOOTBRIDGE. 11KM ESE OF GRAND FORKS. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-10-10	1307	330	21.0	11.0	21.1	--	8.2	--	202.	.75
79-12-14	0900	330	--	1.0	19.5	8.0	7.7	200.	193.	.46
80-01-08	1118	330	-6.0	.5	20.2	--	8.1	--	189.	.37
80-04-14	1430	330	22.0	11.0	18.3	8.4	7.9	120.	116.	5.20
80-04-30	1400	330	28.0	5.0	22.3	--	7.2	--	47.	22.00
80-06-27	1405	330	20.0	13.0	21.1	--	7.7	--	108.	2.40
80-08-05	1428	330	29.0	19.0	24.6	7.3	8.1	160.	158.	.24
80-09-03	1443	330	19.0	15.5	21.3	--	7.9	--	172.	.34
80-09-25	1230	330	19.0	13.0	18.3	7.8	8.0	160.	160.	.34
80-10-14	1420	330	8.0	8.5	22.1	--	7.9	--	178.	.48
80-11-25	1525	330	--	1.0	22.7	--	8.0	--	172.	.30
80-12-01	1538	330	1.5	3.0	22.8	8.6	8.1	240.	173.	.42
80-12-18	1352	330	2.5	1.0	21.6	--	7.8	--	166.	.47
81-01-13	1451	330	2.0	1.0	19.4	--	7.8	--	139.	.29
81-02-09	1614	330	-1.5	.5	16.6	7.7	7.8	160.	140.	.17
81-02-13	1122	330	--	.5	21.1	--	7.7	--	145.	.18
81-03-05	1351	330	8.0	2.0	21.2	--	7.8	--	131.	.44
81-04-06	1433	330	8.0	8.0	18.5	8.3	7.9	130.	121.	.53
81-04-07	1300	330	10.0	4.0	19.9	--	7.8	--	122.	.48
81-05-22	1340	330	20.0	5.5	23.9	--	6.8	--	45.	23.00
81-07-14	1417	330	18.0	12.0	15.4	--	7.6	--	78.	1.00
81-08-20	1545	330	28.0	21.0	20.6	7.8	8.1	145.	129.	.30
81-10-09	1253	330	13.0	8.5	19.7	--	7.5	--	82.	.70

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-10-10	1307	330	5.	.0	88.1	99.4	28.7	6.7	1.1	5.9
79-12-14	0900	330	L5.	.0	85.1	89.8	26.8	5.6	1.2	5.5
80-01-08	1118	330	L5.	.0	87.5	90.9	27.7	5.3	1.2	5.9
80-04-14	1430	330	5.	.0	50.8	52.3	16.0	3.0	.8	3.3
80-04-30	1400	330	110.	.0	16.8	20.1	7.8	.2	.8	1.5
80-06-27	1405	330	15.	.0	47.3	48.6	15.0	2.7	.6	3.0
80-08-05	1428	330	15.	.0	67.9	68.2	20.8	3.9	1.0	4.5
80-09-03	1443	330	10.	.0	77.0	78.6	23.6	4.8	1.1	5.0
80-09-25	1230	330	15.	.0	69.5	70.0	21.8	3.8	1.1	4.4
80-10-14	1420	330	15.	.0	79.3	80.2	23.0	5.5	1.1	5.0
80-11-25	1525	330	5.	.0	74.1	78.7	23.7	4.7	1.0	4.9
80-12-01	1538	330	5.	.0	73.4	76.7	24.4	3.8	1.6	4.7
80-12-18	1352	330	10.	.0	69.3	72.7	21.2	4.8	.9	4.6
81-01-13	1451	330	10.	.0	60.7	64.8	19.0	4.2	.7	4.0
81-02-09	1614	330	10.	.0	59.9	68.0	18.8	5.1	.8	3.9
81-02-13	1122	330	10.	.0	60.9	68.3	19.5	4.8	.8	4.1
81-03-05	1351	330	10	.0	54.8	56.0	18.1	3.1	.7	3.7
81-04-06	1433	330	20	.0	50.8	52.7	16.6	2.7	.7	3.4
81-04-07	1300	330	15.	.0	50.8	52.7	16.5	2.8	.7	3.4
81-05-22	1340	330	40.	.0	17.2	18.5	5.8	1.0	.6	1.3
81-07-14	1417	330	20.	.0	32.9	34.7	10.5	2.1	.4	2.1
81-08-20	1545	330	15.	.0	55.9	59.6	17.3	4.0	.8	3.6
81-10-09	1253	330	25.	.0	37.7	39.7	8.7	4.4	.6	2.4

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NN0022 LAT 49D 0M 29S LONG 118D 18M 11S
KETTLE RIVER AT GILPIN FOOTBRIDGE 11KM ESE OF GRAND FORKS BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-10-10	1307	330	1.1	.295	10.6	15.2	135	--	--	--
79-12-14	0900	330	1.1	.280	12.3	13.8	240	--	--	--
80-01-08	1118	330	1.3	.295	12.4	14.2	380	--	--	--
80-04-14	1430	330	.5	.190	11.8	7.0	013	--	--	--
80-04-30	1400	330	.7	L.050	9.9	3.5	034	--	--	--
80-06-27	1405	330	.6	.154	12.8	5.0	005	--	--	--
80-08-05	1428	330	1.1	.211	12.2	8.0	039	--	--	--
80-09-03	1443	330	1.1	.245	11.9	8.0	159	--	--	--
80-09-25	1230	330	.9	.210	10.8	9.7	018	--	--	--
80-10-14	1420	330	1.3	.220	11.7	10.7	062	--	--	--
80-11-25	1525	330	1.1	.250	12.6	10.9	157	--	--	--
80-12-01	1538	330	1.7	.200	12.0	11.1	184	--	--	--
80-12-18	1352	330	1.0	.240	11.4	10.3	143	--	--	--
81-01-13	1451	330	.9	.200	11.6	9.1	120	--	--	--
81-02-09	1614	330	.8	.180	12.0	8.7	108	--	--	--
81-02-13	1122	330	.9	.180	12.4	9.0	135	--	--	--
81-03-05	1351	330	.6	.190	11.5	7.1	066	--	--	--
81-04-06	1433	330	.8	.180	12.8	6.6	042	--	--	--
81-04-07	1300	330	.8	.110	12.7	6.9	030	--	--	--
81-05-22	1340	330	.5	.100	9.5	1.4	017	--	--	--
81-07-14	1417	330	.5	.110	11.0	4.0	L.002	--	--	--
81-08-20	1545	330	.7	.150	12.5	6.6	048	.275	15.5	1.2
81-10-09	1253	330	.6	.120	10.7	3.9	034	.133	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE HG UG/L	29305P COPPER EXTRBLE CU MG/L	29306P COPPER EXTRBLE CU MG/L
79-10-10	1307	330	--	L10.	127.	L10.	119.	--	--	--
79-12-14	0900	330	--	L10.	127.	L10.	113.	--	--	--
80-01-08	1118	330	--	L10.	131.	L10.	94.	--	--	--
80-04-14	1430	330	--	26.	85.	23.	39.	--	--	--
80-04-30	1400	330	--	114.	51.	102.	28.	--	--	--
80-06-27	1405	330	--	L10.	85.	L10.	58.	--	--	--
80-08-05	1428	330	--	L10.	101.	L10.	83.	--	--	--
80-09-03	1443	330	--	L10.	111.	L10.	68.	--	--	--
80-09-25	1230	330	--	L10.	101.	L10.	80.	--	--	--
80-10-14	1420	330	--	L10.	110.	L10.	95.	--	--	--
80-11-25	1525	330	--	L10.	107.	L10.	95.	--	--	--
80-12-01	1538	330	--	L10.	138.	L10.	84.	--	--	--
80-12-18	1352	330	--	L10.	103.	L10.	93.	--	--	--
81-01-13	1451	330	--	L10.	88.	L10.	77.	--	--	--
81-02-09	1614	330	--	L10.	91.	L10.	81.	--	--	--
81-02-13	1122	330	--	L10.	97.	L10.	74.	--	--	--
81-03-05	1351	330	--	L10.	92.	L10.	58.	--	--	--
81-04-06	1433	330	--	L10.	86.	L10.	61.	--	--	--
81-04-07	1300	330	--	L10.	94.	L10.	59.	--	--	--
81-05-22	1340	330	--	118.	38.	105.	13.	--	--	--
81-07-14	1417	330	--	L10.	60.	L10.	36.	--	--	--
81-08-20	1545	330	--	L10.	85.	L10.	63.	L.05	L.001	--
81-10-09	1253	330	--	L10.	63.	L10.	41.	L.05	L.001	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NN0022 LAT. 49D 0M 29S LONG. 118D 18M 11S
KETTLE RIVER AT GILPIN FOOTBRIDGE. 11KM ESE OF GRAND FORKS. BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-10-10	1307	330	.0008	.0002	--	--	--	--	--	--
79-12-14	0900	330	.0006	.0002	--	--	--	--	--	--
80-01-08	1118	330	.0009	.0003	--	--	--	--	--	--
80-04-14	1430	330	.0004	L.0001	--	--	--	--	--	--
80-04-30	1400	330	.0004	L.0001	--	--	--	--	--	--
80-06-27	1405	330	.0004	L.0001	--	--	--	--	--	--
80-08-05	1428	330	.0005	.0002	--	--	--	--	--	--
80-09-03	1443	330	.0005	.0001	--	--	--	--	--	--
80-09-25	1230	330	.0003	L.0001	--	--	--	--	--	--
80-10-14	1420	330	.0004	L.0001	--	--	--	--	--	--
80-11-25	1525	330	.0005	.0002	--	--	--	--	--	--
80-12-01	1538	330	.0006	L.0001	--	--	--	--	--	--
80-12-18	1352	330	.0005	.0001	--	--	--	--	--	--
81-01-13	1451	330	.0004	.0001	--	--	--	--	--	--
81-02-09	1614	330	.0003	.0001	--	--	--	--	--	--
81-02-13	1122	330	.0004	.0001	--	--	--	--	--	--
81-03-05	1351	330	.0003	L.0001	--	--	--	--	--	--
81-04-06	1433	330	.0003	L.0001	--	--	--	--	--	--
81-04-07	1300	330	.0003	L.0001	--	--	--	--	--	--
81-05-22	1340	330	.0005	L.0001	--	--	--	--	--	--
81-07-14	1417	330	.0001	L.0001	--	--	--	--	--	--
81-08-20	1545	330	.0004	.0001	--	.020	--	.003	.06	--
81-10-09	1253	330	.0004	L.0001	--	.010	--	.008	.17	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-10-10	1307	330	--	--	6.40	--	--	--
79-12-14	0900	330	--	--	6.80	--	--	--
80-01-08	1118	330	--	--	6.09	--	--	--
80-04-14	1430	330	--	--	58.60	--	--	--
80-04-30	1400	330	--	--	665.00	--	--	--
80-05-07	1200	330	--	--	--	--	685.00	--
80-06-27	1405	330	--	--	107.00	--	--	--
80-08-05	1428	330	--	--	26.30	--	--	--
80-09-03	1443	330	--	--	17.80	--	--	--
80-09-25	1230	330	--	--	19.70	--	--	--
80-10-14	1420	330	--	--	15.10	--	--	--
80-11-25	1525	330	--	--	12.50	--	--	--
80-11-29	1200	330	--	--	--	--	--	4.25
80-12-01	1538	330	--	--	15.80	--	--	--
80-12-18	1352	330	--	--	17.70	--	--	--
80-12-31	1200	330	--	--	--	79.10	--	--
81-01-13	1451	330	--	--	21.90	--	--	--
81-01-17	1200	330	--	--	--	--	--	15.30
81-02-09	1614	330	--	--	18.70	--	--	--
81-02-13	1122	330	--	--	22.10	--	--	--
81-03-05	1351	330	--	--	41.90	--	--	--
81-04-06	1433	330	--	--	71.40	--	--	--
81-04-07	1300	330	--	--	69.90	--	--	--
81-05-22	1340	330	--	--	569.00	--	--	--
81-05-27	1200	330	--	--	--	--	617.00	--
81-07-14	1417	330	--	--	171.00	--	--	--
81-08-20	1545	330	L.0005	.001	42.50	--	--	--
81-10-09	1253	330	L.0005	L.001	67.70	--	--	--
81-12-31	1200	330	--	--	--	105.00	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NP0003 LAT. 49D 0M 15S LONG. 114D 28M 45S
FLATHEAD RIVER, 0.3 KM ABOVE U.S.A. - CANADA BORDER CROSSING, BRITISH COLUMBIA.
WATER SURVEY SITE 08NP001. (INTERPRETIVE REPORT STATION 3)

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT USIE/CM	02073L TURBIDITY JTU
79-07-19	1530	330	--	16.0	20.4	--	8.5	--	238.	1.30
79-09-07	0915	330	--	10.0	21.7	--	8.3	--	269.	.31
79-11-14	0915	330	--	.0	18.4	--	8.3	--	279.	.50
80-01-18	1250	330	-7.0	0	19.4	--	8.2	--	271.	48
80-03-07	1315	330	-1.0	.0	19.9	--	8.4	--	273.	68
80-04-24	1145	330	10.5	3.5	22.0	--	7.6	--	200.	33.00
80-05-21	1215	330	22.5	7.5	21.0	--	8.0	--	158.	9.60
80-06-17	1000	330	18.5	8.5	21.1	--	8.1	--	203.	.83
80-07-24	1505	330	22.0	16.0	24.1	--	8.3	--	260.	.46
	1507	330	22.0	16.0	23.4	--	8.3	--	259.	.32
80-09-10	1100	330	18.5	10.5	21.6	--	8.3	--	259.	.33
80-11-06	1110	330	8.0	5.5	22.2	--	8.3	--	265.	1.00
81-05-07	0940	330	5.0	4.0	19.8	--	8.0	--	220.	9.70
81-05-21	1205	330	13.0	5.0	23.8	--	7.9	--	179.	40.00
81-06-01	1043	330	--	1.0	19.7	--	8.1	--	229.	.39
81-06-04	1125	330	13.0	7.0	20.4	--	8.1	--	162.	15.00
81-07-03	1600	330	28.5	13.0	19.6	--	8.3	--	199.	3.00
81-08-13	1100	330	24.0	14.0	21.4	--	8.5	--	249.	.32
81-10-16	1730	330	7.0	5.0	18.8	--	8.2	--	266.	40
81-11-30	1530	330	.0	.0	20.5	--	8.2	--	254.	16

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-19	1530	330	L5.	.8	124.0	131.0	38.3	8.6	.2	7
79-09-07	0915	330	L5.	.0	141.0	143.0	43.3	8.5	.3	.9
79-11-14	0915	330	L5.	.0	149.0	157.0	47.0	9.6	L.2	.8
80-01-18	1250	330	L5	.0	143.0	147.0	44.3	8.8	.3	.9
80-03-07	1315	330	L5	1.0	144.0	150.0	43.7	9.9	L.2	1.0
80-04-24	1145	330	60.	.0	101.0	106.0	33.6	5.4	.4	.9
80-05-21	1215	330	20.	.0	82.4	84.7	27.3	4.0	4	1.1
80-06-17	1000	330	5.	.0	104.0	108.0	33.4	6.0	.2	4
80-07-24	1505	330	15.	1.0	135.0	138.0	43.9	6.9	2	8
	1507	330	10.	.9	135.0	138.0	41.9	8.1	2	.8
80-09-10	1100	330	5.	.0	137.0	141.0	37.5	11.5	.2	.7
80-11-06	1110	330	10.	.0	132.0	139.0	41.7	8.5	3	.8
81-05-07	0940	330	15.	.0	108.0	111.0	33.5	6.6	2	.8
81-05-21	1205	330	10.	.0	87.3	88.4	26.6	5.3	.3	.5
81-06-01	1043	330	10	.0	117.0	122.0	36.5	7.5	4	.9
81-06-04	1125	330	10.	.0	81.3	82.0	25.6	4.4	4	.7
81-07-03	1600	330	10.	.0	99.2	103.0	31.3	6.0	L.2	.6
81-08-13	1100	330	10.	2.1	133.0	133.0	40.1	8.0	.3	.9
81-10-16	1730	330	5.	.0	137.0	143.0	40.9	9.9	L.2	.9
81-11-30	1530	330	L5.	.0	143.0	145.0	42.4	9.5	2	.9

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-19	1530	330	.2	.065	4.6	5.2	L.002	--	--	--
79-09-07	0915	330	.2	.096	4.8	5.2	L.002	--	--	--
79-11-14	0915	330	.3	.095	4.7	8.0	.007	--	--	--
80-01-18	1250	330	.3	.140	4.7	6.8	.016	--	--	--
80-03-07	1315	330	.3	.100	4.6	6.7	.194	--	--	--
80-04-24	1145	330	.3	.080	4.5	4.9	.055	--	--	--
80-05-21	1215	330	.2	.070	4.0	4.2	L.002	--	--	--
80-06-17	1000	330	L.2	.072	4.4	4.0	L.002	--	--	--
80-07-24	1505	330	.2	.093	4.7	4.1	.026	--	--	--
	1507	330	.2	.092	4.7	3.8	L.002	--	--	--
80-09-10	1100	330	.3	.096	4.7	4.7	.002	--	--	--
80-11-06	1110	330	.5	.080	4.9	6.2	L.002	--	--	--
81-05-07	0940	330	.3	.070	4.8	3.1	.024	--	--	--
81-05-21	1205	330	.3	.070	4.1	2.5	.019	--	--	--
81-06-01	1043	330	.4	.080	4.5	6.0	.008	--	--	--
81-06-04	1125	330	.3	.070	4.1	2.4	.007	--	--	--
81-07-03	1600	330	.2	.060	4.3	3.0	L.002	--	--	--
81-08-13	1100	330	.3	.090	5.2	3.8	L.002	--	--	--
81-10-16	1730	330	.3	.090	4.6	4.5	.005	.076	--	--
81-11-30	1530	330	.3	1.100	4.6	5.1	.017	.106	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 008C08NP0003 LAT. 49D 0M 15S LONG. 114D 28M 45S
FLATHEAD RIVER, 0.3 KM ABOVE U.S.A. - CANADA BORDER CROSSING, BRITISH COLUMBIA.
WATER SURVEY SITE 08NP001. (INTERPRETIVE REPORT STATION 3)

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-07-19	1530	330	--	L10.	140.	L10.	126.	--	--	--
79-09-07	0915	330	--	L10.	161.	L10.	136.	--	--	--
79-11-14	0915	330	--	L10.	151.	L10.	139.	--	--	--
80-01-18	1250	330	--	L10.	162.	L10.	145.	--	--	--
80-03-07	1315	330	--	L10.	153.	L10.	133.	--	--	--
80-04-24	1145	330	--	160.	117.	143.	62.	--	--	--
80-05-21	1215	330	--	39.	100.	32.	75.	--	--	--
80-06-17	1000	330	--	L10.	120.	L10.	91.	--	--	--
80-07-24	1505	330	--	L10.	140.	L10.	130.	--	--	--
	1507	330	--	L10.	150.	L10.	130.	--	--	--
80-09-10	1100	330	--	L10.	150.	L10.	114.	--	--	--
80-11-06	1110	330	--	L10.	140.	L10.	130.	--	--	--
81-05-07	0940	330	--	33.	122.	77.	102.	--	--	--
81-05-21	1205	330	--	133.	104.	122.	84.	--	--	--
81-06-01	1043	330	--	L10.	129.	L10.	105.	--	--	--
81-06-04	1125	330	--	46.	103.	42.	93.	--	--	--
81-07-03	1600	330	--	L10.	102.	L10.	56.	--	--	--
81-08-13	1100	330	--	L10.	180.	L10.	120.	--	--	--
81-10-16	1730	330	--	L10.	160.	L10.	130.	L.05	L.001	--
81-11-30	1530	330	--	L10.	144.	L10.	96.	L.05	L.001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-07-19	1530	330	.0001	.0001	--	--	--	--	--	--
79-09-07	0915	330	.0003	.0001	--	--	--	--	--	--
79-11-14	0915	330	.0002	.0001	--	--	--	--	--	--
80-01-18	1250	330	.0003	.0003	--	--	--	--	--	--
80-03-07	1315	330	.0002	.0002	--	--	--	--	--	--
80-04-24	1145	330	.0011	.0001	--	--	--	--	--	--
80-05-21	1215	330	.0003	.0001	--	--	--	--	--	--
80-06-17	1000	330	.0005	.0001	--	--	--	--	--	--
80-07-24	1505	330	.0002	.0002	--	--	--	--	--	--
	1507	330	.0003	.0001	--	--	--	--	--	--
80-09-10	1100	330	0003	.0002	--	--	--	--	--	--
80-11-06	1110	330	.0002	.0002	--	--	--	--	--	--
81-05-07	0940	330	.0002	.0001	--	--	--	--	--	--
81-05-21	1205	330	.0005	L.0001	--	--	--	--	--	--
81-06-01	1043	330	.0002	.0002	--	--	--	--	--	--
81-06-04	1125	330	.0004	.0001	--	--	--	--	--	--
81-07-03	1600	330	.0002	.0001	--	--	--	--	--	--
81-08-13	1100	330	.0003	.0002	--	--	--	--	--	--
81-10-16	1730	330	.0004	.0002	--	L.010	--	L.001	--	.011
81-11-30	1530	330	.0003	.0001	--	L.010	--	L.001	--	.015

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - **OOBCO8NP0003** LAT. 49D 0M 15S LONG. 114D 28M 45S
FLATHEAD RIVER, 0.3 KM ABOVE U.S.A. - CANADA BORDER CROSSING, BRITISH COLUMBIA
WATER SURVEY SITE 08NP001. (INTERPRETIVE REPORT STATION 3)

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
79-07-19	1530	330	--	--	14.20	--	--	--
79-09-07	0915	330	--	--	6.29	--	--	--
79-11-14	0915	330	--	--	3.96	--	--	--
80-01-18	1250	330	--	--	3.85	--	--	--
80-01-28	1200	330	--	--	--	--	--	2.15
80-03-07	1315	330	--	--	3.68	--	--	--
80-04-24	1145	330	--	--	86.10	--	--	--
80-04-30	1200	330	--	--	--	--	155.00	--
80-05-21	1215	330	--	--	103.00	--	--	--
80-06-17	1000	330	--	--	45.70	--	--	--
80-07-24	1505	330	--	--	11.90	--	--	--
	1507	330	--	--	11.90	--	--	--
80-09-10	1100	330	--	--	8.91	--	--	--
80-11-06	1110	330	--	--	8.34	--	--	--
80-12-31	1200	330	--	--	--	22.50	--	--
81-05-07	0940	330	--	--	61.20	--	--	--
81-05-21	1205	330	--	--	146.00	--	--	--
81-05-26	1200	330	--	--	--	--	181.00	--
81-06-04	1125	330	--	--	103.00	--	--	--
81-07-03	1600	330	--	--	51.30	--	--	--
81-08-13	1100	330	--	--	11.90	--	--	--
81-10-16	1730	330	L 0005	L 001	5.99	--	--	--
81-11-30	1530	330	L 0005	L 001	5.58	--	--	--
81-12-16	1200	330	--	--	--	--	--	3.26
81-12-31	1200	330	--	--	--	26.80	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08NP0006 LAT. 49D 4M 13S LONG. 114D 27M 55S
SAGE CREEK. 0.5 MILES NORTH OF PROCTOR LAKE . ROAD BRIDGE. BRITISH COLUMBIA.
(INTERPRETIVE REPORT STATION 4)

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG. C	02061S TEMP. WATER DEG. C.	02061L TEMP. WATER DEG. C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-07-19	0745	330	30.0	10.0	20.3	--	8.0	--	117.	1.90
79-09-07	0730	330	--	8.0	21.5	--	8.0	--	159.	.26
79-11-14	1750	330	--	.0	18.3	--	7.9	--	178.	1.20
80-04-21	1250	330	10.5	4.0	21.8	--	7.3	--	107.	5.70
80-05-07	1715	330	8.5	5.0	20.2	--	7.7	--	76.	2.50
80-06-17	0820	330	16.0	7.0	21.1	--	7.6	--	79.	.76
80-07-24	0815	330	15.0	11.5	23.8	--	7.9	--	136.	.33
	0818	330	15.0	11.5	23.6	--	7.9	--	136.	.24
80-09-10	1600	330	22.0	12.5	21.7	--	7.9	--	154.	.27
80-11-20	1445	330	2.5	1.0	19.8	--	7.9	--	144.	.39
81-01-15	0930	330	-8.5	--	19.5	--	7.5	--	145.	.25
81-04-07	1215	330	3.0	3.0	18.7	--	8.1	--	174.	.23
81-05-21	1745	330	13.0	5.0	23.9	--	7.7	--	82.	7.00
81-07-03	0810	330	12.5	6.0	19.3	--	7.7	--	82.	1.50
81-08-13	1650	330	28.0	18.0	21.4	--	8.2	--	144	26
81-10-28	1000	330	2.0	3.5	21.8	--	7.7	--	178.	12

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-19	0745	330	L5.	.0	50.3	59.0	16.3	4.4	.3	1.4
79-09-07	0730	330	L5.	.0	68.2	77.7	21.5	5.8	.4	1.8
79-11-14	1750	330	L5.	.0	72.2	88.5	25.5	6.0	.3	2.1
80-04-21	1250	330	25.	.0	43.4	52.7	15.9	3.2	.4	1.4
80-05-07	1715	330	20.	.0	31.8	35.9	12.0	1.4	.6	.9
80-06-17	0820	330	5.	.0	34.6	38.8	12.7	1.7	.2	.4
80-07-24	0815	330	15.	.0	56.5	65.4	18.4	4.7	.5	1.6
	0818	330	10.	.0	57.2	65.2	19.2	4.2	.4	1.6
80-09-10	1600	330	5.	.0	62.1	73.4	19.1	6.2	.4	1.7
80-11-20	1445	330	10.	.0	56.9	65.1	17.5	5.2	.3	1.7
81-01-15	0930	330	5.	.0	64.5	73.1	20.3	5.4	.2	1.7
81-04-07	1215	330	10.	.0	72.9	83.4	23.0	6.3	.3	2.0
81-05-21	1745	330	15.	.0	35.4	38.1	10.6	2.8	.4	.7
81-07-03	0810	330	10.	.0	37.4	41.3	11.5	3.1	.3	.8
81-08-13	1650	330	5.	.0	58.9	65.5	16.5	5.9	.3	1.5
81-10-28	1000	330	5.	.0	72.3	86.9	23.6	6.8	.3	2.0

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-19	0745	330	.3	L.050	4.7	8.5	.005	--	--	--
79-09-07	0730	330	.6	.053	5.2	13.2	.024	--	--	--
79-11-14	1750	330	1.0	.066	5.2	18.0	.060	--	--	--
80-04-21	1250	330	.7	.210	4.7	8.9	.157	--	--	--
80-05-07	1715	330	.3	L.050	4.2	4.1	.037	--	--	--
80-06-17	0820	330	L.2	L.050	4.2	4.1	002	--	--	--
80-07-24	0815	330	.3	L.050	4.9	9.1	L.002	--	--	--
	0818	330	.3	L.050	4.9	9.7	.048	--	--	--
80-09-10	1600	330	.5	.046	4.8	10.0	.006	--	--	--
80-11-20	1445	330	.6	.040	4.7	11.5	.046	--	--	--
81-01-15	0930	330	.7	L.050	5.1	10.6	.061	--	--	--
81-04-07	1215	330	.7	L.050	5.3	11.9	.034	--	--	--
81-05-21	1745	330	.3	.040	4.7	3.3	040	--	--	--
81-07-03	0810	330	.2	.030	4.1	4.0	.006	--	--	--
81-08-13	1650	330	.4	.030	7.4	8.5	.008	--	--	--
81-10-28	1000	330	.8	.820	5.2	14.1	.110	.165	--	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 00BC08NP0006 LAT. 49D 4M 13S LONG. 114D 27M 55S
SAGE CREEK, 0.5 MILES NORTH OF PROCTOR LAKE ROAD BRIDGE. BRITISH COLUMBIA.
(INTERPRETIVE REPORT STATION 4)

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE CU MG/L
79-07-19	0745	330	--	L10.	72.	L10.	60	--	--	--
79-09-07	0730	330	--	L10	98.	L10.	78	--	--	--
79-11-14	1750	330	--	L10.	105.	L10.	96	--	--	--
80-04-21	1250	330	--	15.	85.	14.	50	--	--	--
80-05-07	1715	330	--	10.	95.	L10	32	--	--	--
80-06-17	0820	330	--	L10.	40.	L10	35	--	--	--
80-07-24	0815	330	--	L10.	89.	L10.	78	--	--	--
	0818	330	--	L10	87.	L10	72	--	--	--
80-09-10	1600	330	--	L10.	87.	L10.	67	--	--	--
80-11-20	1445	330	--	L10.	87.	L10.	66	--	--	--
81-01-15	0930	330	--	L10	90.	L10	L10	--	--	--
81-04-07	1215	330	--	L10.	73.	L10	68.	--	--	--
81-05-21	1745	330	--	26.	61.	22	44	--	--	--
81-07-03	0810	330	--	L10	46	L10.	23	--	--	--
81-08-13	1650	330	--	L10.	95	L10	65	--	--	--
81-10-28	1000	330	--	L10	90	L10	65	L.05	L.001	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE MN MG/L	30304P ZINC EXTRBL ZN MG/L	30305P ZINC EXTRBLE ZN MG/L	26304P IRON EXTRBLE FE MG/L	26305P IRON EXTRBLE FE MG/L
79-07-19	0745	330	.0001	L.0001	--	--	--	--	--	--
79-09-07	0730	330	.0007	L.0001	--	--	--	--	--	--
79-11-14	1750	330	.0002	L.0001	--	--	--	--	--	--
80-04-21	1250	330	.0006	.0001	--	--	--	--	--	--
80-05-07	1715	330	.0003	L.0001	--	--	--	--	--	--
80-06-17	0820	330	.0004	L.0001	--	--	--	--	--	--
80-07-24	0815	330	.0002	.0001	--	--	--	--	--	--
	0818	330	.0002	.0001	--	--	--	--	--	--
80-09-10	1600	330	.0003	L.0001	--	--	--	--	--	--
80-11-20	1445	330	.0002	L.0001	--	--	--	--	--	--
81-01-15	0930	330	.0002	L.0001	--	--	--	--	--	--
81-04-07	1215	330	.0002	L.0001	--	--	--	--	--	--
81-05-21	1745	330	.0003	L.0001	--	--	--	--	--	--
81-07-03	0810	330	.0003	L.0001	--	--	--	--	--	--
81-08-13	1650	330	.0004	.0001	--	--	--	--	--	--
81-10-28	1000	330	.0003	L.0001	--	.010	--	.001	--	.011

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	97167S DISCHARGE DAILY MEAN M3/S	97170S ANNUAL MEAN DISCHARGE M3/S	97172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	97174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
81-10-28	1000	330	L.0005	.001	--	--	--	--

FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08PA0001 LAT. 49D 1M 14S LONG. 121D 2M 38S
SKAGIT RIVER 2 KM NORTH OF BOUNDARY OBELISK, LOGGING HWY BRIDGE. BRITISH COLUMBIA.

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	97060S TEMP. AIR DEG.C	02061S TEMP. WATER DEG.C.	02061L TEMP. WATER DEG.C.	10301S PH PH UNITS	10301L PH PH UNITS	02041S SPECIFIC CONDUCT. USIE/CM	02041L SPECIFIC CONDUCT. USIE/CM	02073L TURBIDITY JTU
79-07-17	1630	330	--	15.0	20.6	--	7.8	--	101.	1.00
80-05-01	1300	330	25.0	9.0	22.1	--	7.6	--	84.	4.40
80-07-03	1558	330	15.5	10.0	21.1	--	7.6	--	94.	2.30
80-10-23	1655	330	6.0	6.0	12.8	--	7.9	--	127.	.25
81-01-17	1410	330	1.0	2.5	19.5	--	7.0	--	117.	.20
81-02-11	1624	330	-1.5	1.0	20.5	--	7.5	--	125.	.15
81-05-01	1355	330	15.0	6.0	20.5	--	7.5	--	76.	36.00
81-07-21	1255	330	17.0	9.0	19.0	--	7.8	--	97.	1.00
81-10-13	1340	330	7.5	16.0	20.4	--	7.6	--	117.	.20

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	02011L COLOUR APPARENT REL. UNITS	10151L ALKALINITY PHENOL PHTHALEIN CACO3 MG/L	10101L ALKALINITY TOTAL CACO3 MG/L	10603L HARDNESS TOTAL CACO3 MG/L	20101L CALCIUM DISSOLVED CA MG/L	12101L MAGNESIUM DISSOLVED (CALCD.) MG MG/L	19103L POTASSIUM DISSOLVED K MG/L	11103L SODIUM DISSOLVED NA MG/L
79-07-17	1630	330	L5.	.0	40.8	49.8	16.8	1.9	.4	1.4
80-05-01	1300	330	20.	.0	34.6	39.9	14.7	.8	.3	1.2
80-07-03	1558	330	5.	.0	37.3	43.5	14.7	1.6	.3	1.4
80-10-23	1655	330	5.	.0	50.4	56.8	18.6	2.5	.4	1.5
81-01-17	1410	330	5.	.0	46.6	56.9	18.3	2.7	.4	1.6
81-02-11	1624	330	5.	.0	50.8	62.5	19.3	3.5	.4	1.7
81-05-01	1355	330	15.	.0	28.3	33.8	11.6	1.2	.3	1.1
81-07-21	1255	330	5.	.0	37.8	45.3	14.5	2.2	.2	1.3
81-10-13	1340	330	10.	.0	47.6	57.6	14.1	5.4	.5	1.5

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	17206L CHLORIDE DISSOLVED CL MG/L	09106L FLUORIDE DISSOLVED F MG/L	14105L SILICA REACTIVE SIO2 MG/L	16306L SULPHATE DISSOLVED SO4 MG/L	07110L NITROGEN DISSOLVED NO3 & NO2 N MG/L	07651L NITROGEN DISSOLVED N MG/L	06051L CARBON TOTAL INORGANIC C MG/L	06001L CARBON TOTAL ORGANIC C MG/L
79-07-17	1630	330	.7	.055	7.2	8.7	.034	--	--	--
80-05-01	1300	330	.7	L.050	6.6	6.8	.082	--	--	--
80-07-03	1558	330	.7	L.050	6.8	6.7	.024	--	--	--
80-10-23	1655	330	.6	.050	8.5	10.1	.035	--	--	--
81-01-17	1410	330	.7	.050	8.1	9.2	.077	--	--	--
81-02-11	1624	330	.7	.080	8.5	10.1	.043	--	--	--
81-05-01	1355	330	.6	.040	6.3	5.9	.080	--	--	--
81-07-21	1255	330	.4	.040	6.9	7.4	.024	--	--	--
81-10-13	1340	330	.6	.050	8.3	9.2	.030	.061	--	--

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	06606P CYANIDE CN MG/L	10401L RESIDUE NONFILTR. MG/L	10451L RESIDUE FILTERABLE MG/L	10501L RESIDUE FIXED NONFILTR. MG/L	10551L RESIDUE FIXED FILTERABLE MG/L	80311P MERCURY EXTRBLE. HG UG/L	29305P COPPER EXTRBLE. CU MG/L	29306P COPPER EXTRBLE. CU MG/L
79-07-17	1630	330	--	L10.	62.	L10.	58.	--	--	--
80-05-01	1300	330	--	10.	55.	L10.	38.	--	--	--
80-07-03	1558	330	--	L10.	68.	L10.	37.	--	--	--
80-10-23	1655	330	--	L10.	75.	L10.	70.	--	--	--
81-01-17	1410	330	--	L10.	118.	L10.	86.	--	--	--
81-02-11	1624	330	--	L10.	78.	L10.	51.	--	--	--
81-05-01	1355	330	--	114.	49.	98.	39.	--	--	--
81-07-21	1255	330	--	L10.	58.	L10.	34.	--	--	--
81-10-13	1340	330	--	L10.	100.	L10.	67.	L.05	L.001	--

DETAILED WATER QUALITY DATA
1979 - 1981

STATION - 08BC08PA0001 LAT. 490 1M 14S LONG. 1210 3M 38S
SKAGIT RIVER 2 KM NORTH OF BOUNDARY OBELISK LOGGING HWY BRIDGE BRITISH COLUMBIA

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	33304L ARSENIC EXTRBLE. AS MG/L	34302L SELENIUM EXTRBLE. SE MG/L	25304P MANGANESE EXTRBLE. MN MG/L	25305P MANGANESE EXTRBLE. MN MG/L	30304P ZINC EXTRBL. ZN MG/L	30305P ZINC EXTRBLE. ZN MG/L	26304P IRON EXTRBLE. FE MG/L	26305P IRON EXTRBLE. FE MG/L
79-07-17	1630	330	.0004	.0002	--	--	--	--	--	--
80-05-01	1300	330	.0013	.0002	--	--	--	--	--	--
80-07-03	1558	330	.0006	.0002	--	--	--	--	--	--
80-10-23	1855	330	.0006	.0002	--	--	--	--	--	--
81-01-17	1410	330	.0006	.0002	--	--	--	--	--	--
81-02-11	1624	330	.0005	.0003	--	--	--	--	--	--
81-05-01	1355	330	.0013	.0001	--	--	--	--	--	--
81-07-21	1255	330	.0006	.0002	--	--	--	--	--	--
81-10-13	1340	330	.0004	.0003	--	L.010	--	L.001	--	045

DATE YMD/AMJ	TIME/ HEURE	SUB-ID/ SOUS-ID	48302P CADMIUM EXTRBLE. CD MG/L	82302P LEAD EXTRBLE. PB MG/L	91167S DISCHARGE DAILY MEAN M3/S	91170S ANNUAL MEAN DISCHARGE M3/S	91172S MAXIMUM DAILY DISCHARGE FOR YEAR M3/S	91174S MINIMUM DAILY DISCHARGE FOR YEAR M3/S
81-10-13	1340	330	L.0005	L.001	--	--	--	--

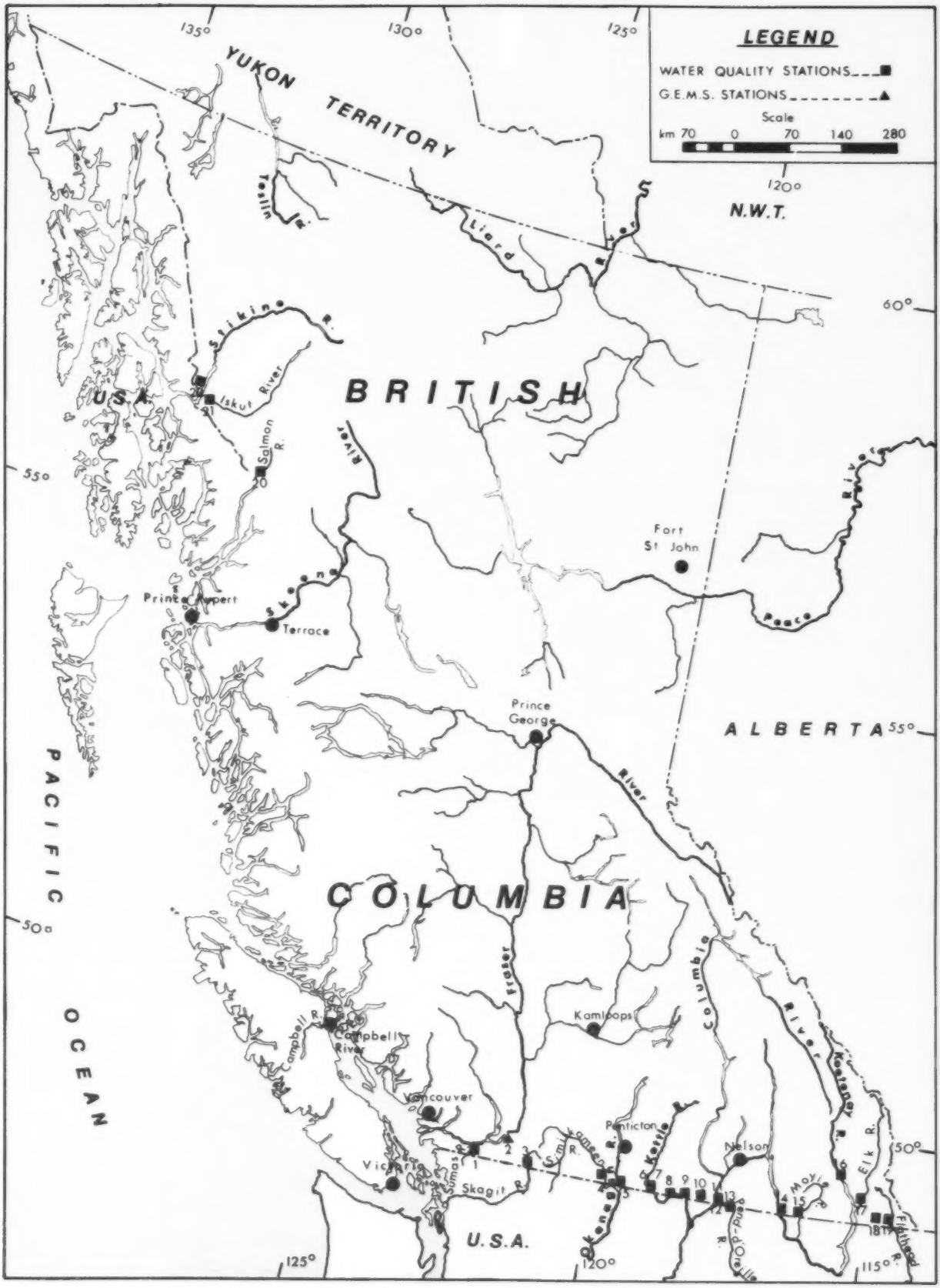
FOOTNOTE: L - LESS THAN DETECTION LIMIT G - GREATER THAN MEASUREMENT LIMIT
NOTEZ BIEN: L - PLUS PETIT QUE LA LIMITE DE DETECTION G - PLUS GRAND QUE LA LIMITE MESURE

Alphabetical Station Index

WATER QUALITY STATIONS : ALPHABETICAL:INDEX

Location Description	Station Number	Latitude o ' "	Longitude o ' "	Page	Map No.
BIG SHEEP CREEK AT HIGHWAY BRIDGE	00BC08NE0010	49:00:55	117:56:39	13	10
BOUNDARY CREEK AT MIDWAY	00BC08NN0010	49:00:06	118:45:38	38	7
COLUMBIA RIVER AT WANETA	00BC08NE0001	49:01:39	117:36:11	11	11
ELK RIVER AT PHILLIP'S BRIDGE	00BC08NK0002	49:12:55	115:06:33	31	17
FLATHEAD RIVER AT INTERNATIONAL BOUNDARY	00BC08NP0003	49:00:15	114:28:45	49	19
FRASER RIVER AT HOPE #GEMS#	00BC08MF0001	49:23:12	121:26:58	5	2
ISKUT RIVER BELOW JOHNSON RIVER	00BC08CG0001	56:44:20	131:40:23	4	21
KETTLE RIVER AT CARSON	00BC08NN0021	49:00:00	118:29:48	43	8
KETTLE RIVER AT GILPIN	00BC08NN0022	49:00:29	118:18:11	46	9
KETTLE RIVER AT MIDWAY	00BC08NN0011	49:00:16	118:46:28	40	6
KOOTENAY RIVER AT NICK'S ISL.	00BC08NH0005	49:07:00	116:34:45	25	14
KOOTENAY RIVER AT WARDNER	00BC08NH0002	49:25:17	115:25:10	19	16
MOYIE RIVER AT KINGSGATE	00BC08NH0010	49:00:16	116:10:46	28	15
OKANAGAN RIVER AT OLIVER	00BC08NM0001	49:07:04	119:34:04	36	5
PEND-D'OREILLE RIVER BELOW INTERNATIONAL BOUNDARY	00BC08NE0020	49:01:23	117:22:09	15	13
PEND-D'OREILLE RIVER AT WANETA	00BC08NE0029	49:00:11	117:37:00	17	12
SAGE CREEK AT ROAD BRIDGE	00BC08NP0006	49:04:13	114:27:55	52	18
SALMON RIVER NEAR HYDER, ALASKA	00AK08DC0001	56:01:18	130:04:17	1	20
SIMILKAMEEN RIVER NEAR U.S. BOUNDARY	00BC08NL0005	49:04:45	119:42:33	33	4
SKAGIT RIVER 2KM NORTH OF BOUNDARY OBELISK	00BC08PA0001	49:01:14	121:03:38	54	3
STIKINE RIVER ABOVE CHOQUETTE RIVER	00BC08CF0002	56:49:45	131:45:50	3	22
SUMAS RIVER AT HUNTINGTON	00BC08MH0027	49:00:10	122:13:50	8	1

Station Map Location



WATER QUALITY BRANCH MONITORING STATIONS 1979–1981
STATIONS DE SURVEILLANCE DE LA DIRECTION DE LA QUALITÉ DES EAUX 1979-1981